



Beginners ICT Guide For Educators and School Leaders

Technology won't replace teachers, but teachers who use technology will probably replace teachers who don't!



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Beginners ICT Guide for Educators and School Leaders

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Additional Reading Material

ABBREVIATIONS

Gmail	Google mail
Email	Electronic mail



Wifi	Sync	Synchronize
AI		wireless fidelity
MS		Artificial Intelligence
DM		Microsoft
GUI		Direct Message
Esc key		Graphical user interface
Pdf		Escape Key
		portable document format

PREFACE

The journey toward achieving the goal of delivering quality education demands unwavering commitment at both the state and organizational levels. The Quaid-e-Azam Academy for Educational Development (QAED) has been entrusted with a paramount mission: the development of high-quality professional development programs to empower teachers and school leaders across Punjab.

In this educational landscape, ICT remains an essential cornerstone, intricately woven into the very scheme of study for all promotional link training and induction training programs delivered by QAED. It's important to understand that training teachers in ICT skills goes beyond keeping up with technological trends; it's a fundamental driver for



improving the quality of education and preparing students for the future. ICT skills empower teachers to deliver instruction that is not only more engaging, but also personalized and highly effective, streamlining their teaching practices for greater efficiency. Consequently, this contributes to better educational outcomes, providing students with the skills they need to thrive in the digital age.

The module at hand stands as an integral component of our commitment to equip our teachers with essential ICT skills. Its primary objective is to enhance the capacities of both teachers and education managers, enabling them to proficiently utilize ICT skills to elevate the quality of their instruction and assume leadership roles as digitally empowered school leaders. This module is a significant step in building and enhancing the ICT skills of our educators and leaders.

QAED wholeheartedly recognizes and appreciates the invaluable contributions made by all developers and reviewers who played a pivotal role in crafting this training module.

I sincerely believe that this manual will effectively impart the ICT knowledge and skills necessary for teachers and education managers to elevate their capabilities and make a significant impact on educational practices. It is with great anticipation that we embrace this transformative step toward a brighter educational future, one where our educators and leaders are truly empowered in the realm of ICT.

Sarah Rashid
Director General QAED

Beginners ICT Guide

For Educators and School Leaders



Quaid-e-Azam Academy for Educational Development,
Punjab, Pakistan

ICT MODULE SESSION DETAILS

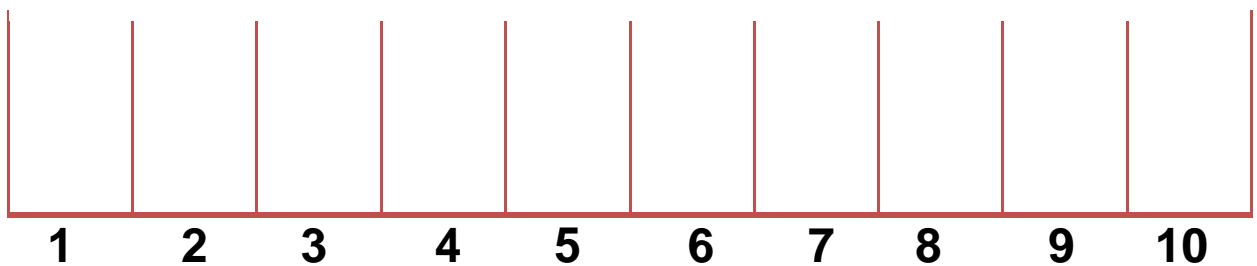
Module Number	Title	No. of Sessions
Pre Learning Activity	Learn the mouse and Keyboard Proficiency	
Module 1	Microsoft Word	5
Module 2	Microsoft PowerPoint	2
Module 3	Microsoft Excel	3
Module 4	Use of Internet	1
Module 5	Microsoft Teams	2



Module 6	Social Media Applications	1
Learning Activities	Hands on Practice and Learning Assessment	1
Reading Material	Digital Citizenship	

RATE YOUR ICT SKILLS

Where would you put yourself on Proficiency Spectrum?





Learn the Mouse & Keyboard Proficiency



Pre- Learning Activity

30 Minutes



Learning Objectives:

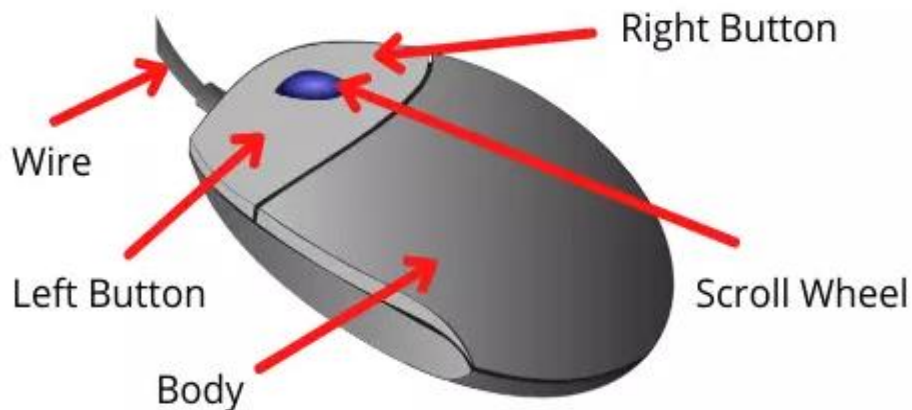
Upon completing this session, participants will be able to

- demonstrate proficient use of the computer mouse for efficient navigation, selection, and interaction with on-screen elements and writing in a variety of software applications
- Understand the purpose of a keyboard and the functions of its keys for effective computer input and text manipulation

What is computer Mouse?

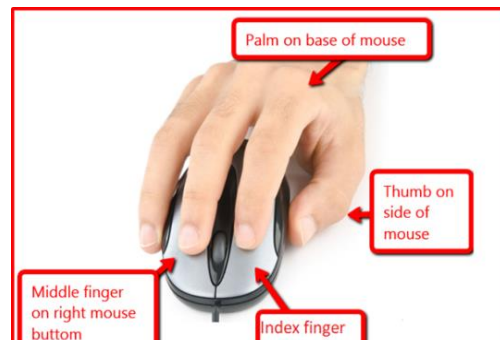
A computer mouse is a **pointing device** that allows you to interact with your computer's graphical user interface (GUI) by **moving a pointer** on the screen. It's like a magic wand that lets you click, select, and manipulate objects on your computer screen. With a mouse, you can perform different tasks like opening programs and files to navigating websites and playing games. Let's learn first about its parts, actions and its handling.

Parts of Computer Mouse



How to Hold a Mouse Properly?

- Place your palm on the base of the mouse.
- Put your thumb on the side of the mouse.
- Put your index finger on the left button.
- Put your middle finger on the right button.
- Put your remaining fingers on the far side of the mouse.
- Your wrist should be straight, following the angle of your arm and not twisted to either side or higher or lower.



Keep your wrist straight



Some common actions you can perform with a mouse:



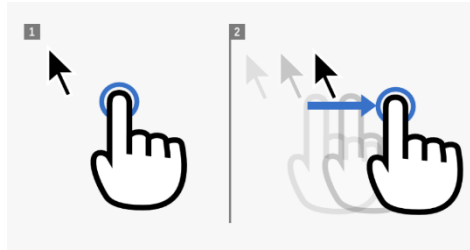
Pointing



Click



Double Click

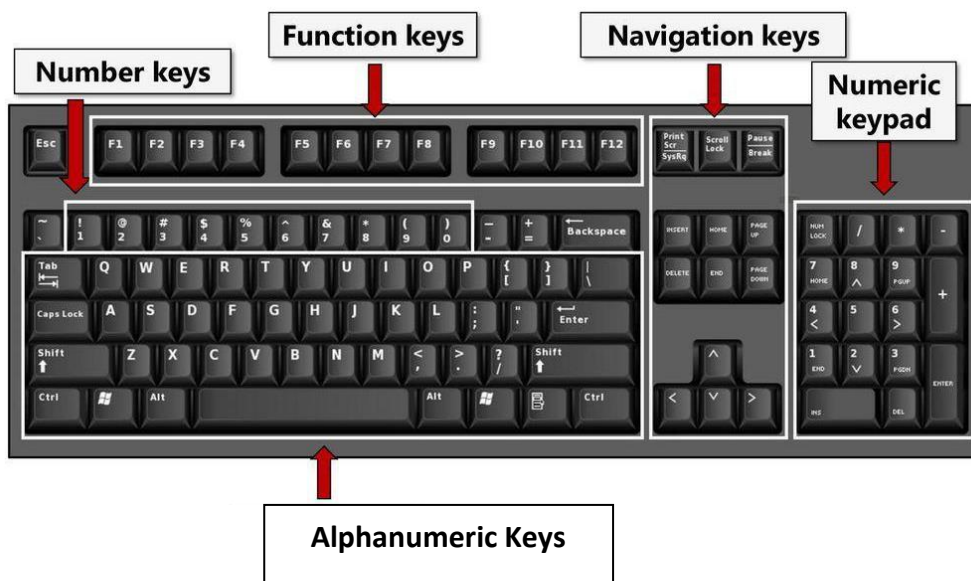


Click- Drag-Drop

Computer Keyboard and

its Parts

A computer keyboard is an input device that allows users to enter text, numbers, and various commands into a computer. It is the primary input device used to interact with a computer. Keyboards come in various layouts and designs, with the most common layout being the QWERTY keyboard.



Alphanumeric Keys

These keys include letters (A-Z), numbers (0-9), and symbols commonly used for typing text and numbers.



Function Keys	The top row of keys (usually labeled as F1, F2, etc.) serves as function keys, which can perform specific tasks or trigger functions within software applications.
Cursor and Navigation Keys	These keys (e.g., arrow keys) are used to move the cursor within documents, web pages, or other content and navigate through menus and interfaces.
Numeric Keypad	Located on the right side of many keyboards, the numeric keypad provides a convenient way to enter numbers and perform mathematical calculations.
Multimedia Keys	Some keyboards include additional keys for special functions like volume control, media playback, and shortcuts to common tasks.
Escape Key (Esc)	Often used to exit or cancel operations within software or to access certain functions in command-line interfaces.
Enter/Return Key	Used to confirm selections or execute commands, such as submitting forms or starting a new paragraph in text documents.
Backspace and Delete Keys	These keys are used for removing characters or items, either by erasing the character to the left (Backspace) or deleting the character to the right (Delete).
Spacebar	The largest key on the keyboard, it's used for inserting spaces between words and elements.



Microsoft Word



Learning Objectives:

Upon completing this session, participants will be able to proficiently demonstrate the following Microsoft Word skills

1. Introduction to MS Word:

- Explain the purpose and importance of Microsoft word in document processing.
- Explain the uses of Microsoft Word in teaching.

2. How to Launch Microsoft Word:

- Launch Microsoft Word using various methods, including desktop shortcuts and the Start menu.
- Create a new blank document from scratch.

3. Interface of MS Word:

- Identify and describe the main components of the Microsoft Word interface, including the ribbon, Quick Access Toolbar, and document workspace.
- Navigate the interface with ease, locating various commands and tools.

4. How to Add & Copy Text:

- Enter text into a Word document using the keyboard.
- Copy Paste & Cut Paste.

5. Text Formatting:

- Apply **Font** formatting.
- Apply **Paragraph** formatting.
- Apply different **Headings** styles.



SESSION-1 Introduction To Microsoft Word 90 minutes

Microsoft Word (MS Word) is a popular word processing software application developed by Microsoft Corporation.

Common Uses

Microsoft Word is designed to create, edit, format, and save documents such as letters, reports, essays, resumes, and more.

How I will use Microsoft Word as teacher or School leader?

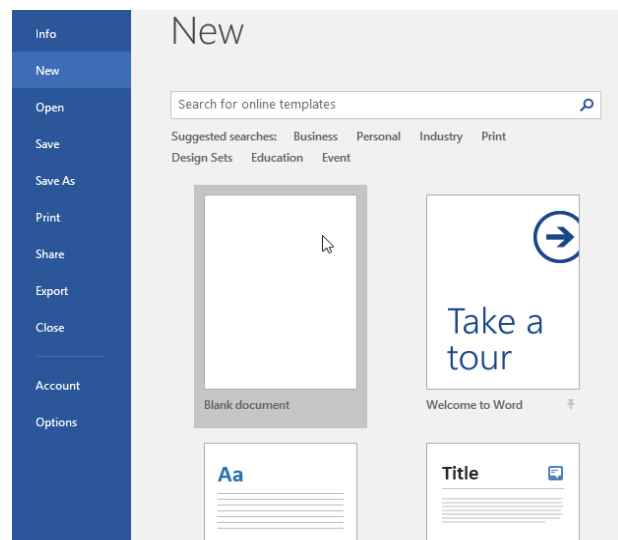
A teacher can use Microsoft Word for a variety of tasks related to lesson planning, teaching, and administrative work. Here are some ways a teacher can use MS Word:

As a Teacher: Creating Lesson Plans, Handouts, CV's, Worksheets, Student Reports and Study Guides.

As a School Leader: Creating Staff statements and School Calendar, Professional report writing and documentation, Students Record lists and Appreciation Certificates etc.

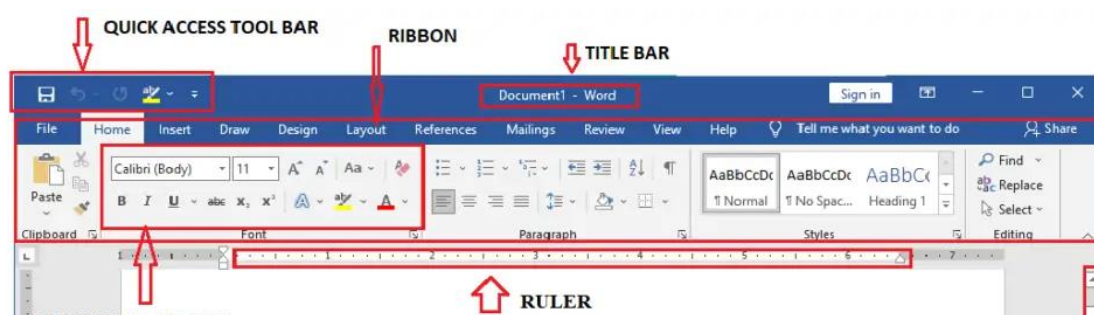
How to Launch Microsoft Word?

- On bottom left corner of computer Screen (Desktop) click on **Start** button.
- From **Start** menu select **Microsoft Office** and then select **Microsoft Word**. OR
- **Search Microsoft Word** from search bar. OR
- Click on **shortcut** icon of **Microsoft Word** available on **desktop**.
- Click on the **New>Blank document** to create new document.



Interface of Microsoft Word (2019)

After clicking **New Blank Document** the working window of **MS Word** appears.





All recent versions of Word include the **Ribbon** and the **Quick Access Toolbar**, where you'll find commands to perform common tasks in Word.

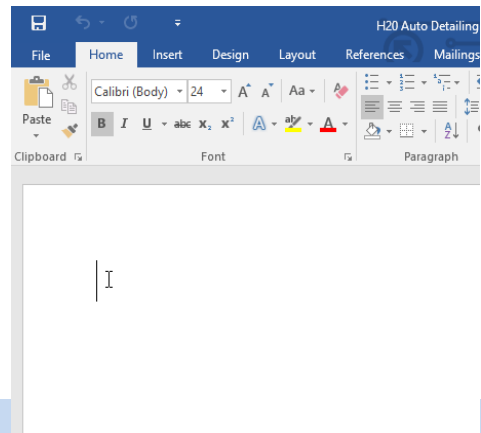
Some Important parts of MS Word Interface are:

▪ Title Bar:	The Title Bar displays the name of the document you are currently using.
▪ The Ribbon:	The Ribbon contains multiple tabs, which you can find near the top of the Word window. Each tab contains several groups of related commands .
▪ The Quick Access Toolbar:	Located just above the Ribbon, the Quick Access Toolbar lets you access common commands like Save, Undo, and Redo .
▪ The Ruler:	The Ruler is located at the top and to the left of your document. It makes it easier to adjust your document with precision.
▪ Scroll Bar:	It allows you to move the view contents up and down or left and right.



How to add Text in Microsoft Word?

- Place the cursor in document area where you want to add the text.
- Start typing.



Selecting the Text

Before applying any formatting to text, we must select the text. We can select the text by:

- Placing the mouse cursor on start of the text and press and hold the left click button and move the mouse to the end of the text and release the mouse button.
- To select a single word, double-click it.
- To select a paragraph, triple click on paragraph.

Text Formatting

Formatted text can draw the reader's attention to specific parts of a document and emphasize important information. In Word, you have several options for adjusting text, including **font**, **size**, and **color** of the text. You can also adjust the **alignment** of the text to change how it is displayed on the page.

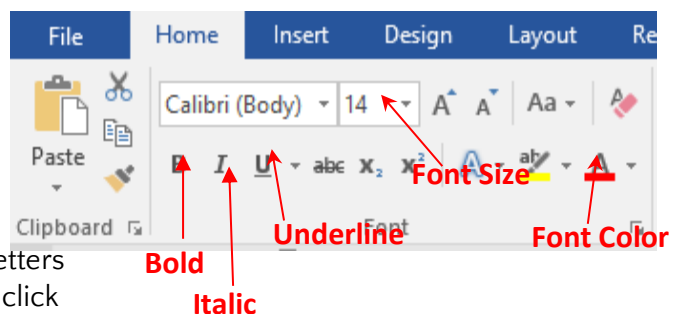
Font Size: You can change the desired size of your font by clicking on **Font Size** drop down menu on **Home tab**.

Bold: If you want to emphasize on a text, click **B** icon located on the **Font** group on the **Home** tab.

The selected text will be Bold.

Italic: Italic is a style of font that slants the letters evenly to the right. To make your text *Italic* click on **I** located on the **Font** group on the **Home** tab.

Underline: If you want to underline a text click **U** icon located on the **Font** group on the **Home** tab.

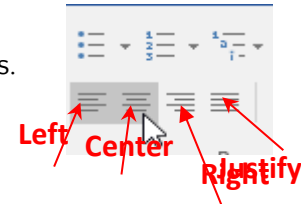


Copy Formatting

- Select the text with the formatting you want to copy.
- Click **Format painter**, and then select the text you want to copy the formatting to.

Text alignment is a paragraph formatting attribute that determines the appearance of the text in a whole paragraph.

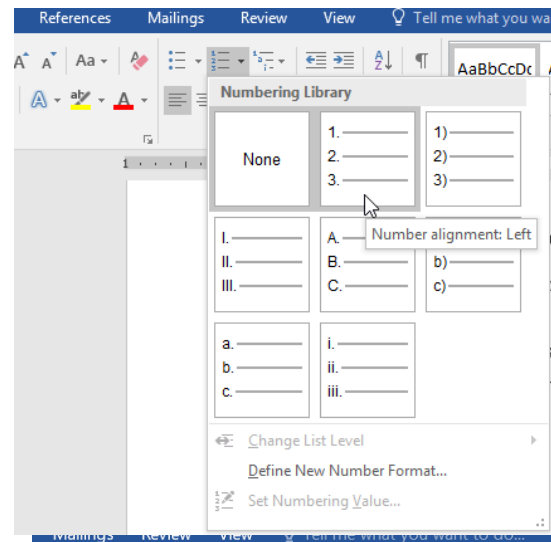
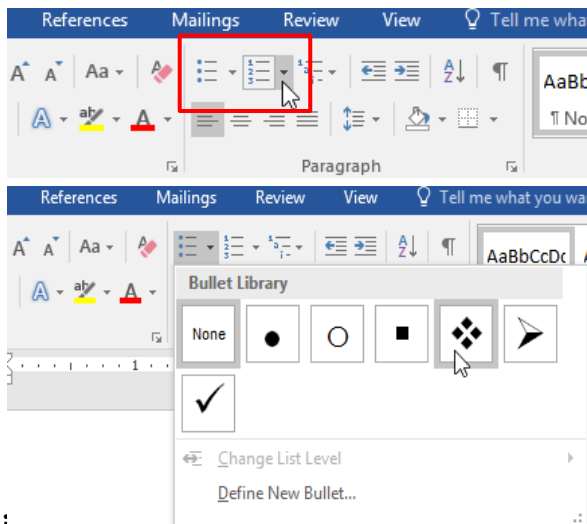
- By default, Word aligns text to the **left margin** in new documents.
- However, there may be times when you want to adjust text alignment to the center or right.
- Alignments are located on the **Home** tab on **Paragraph** group.



Bullets & Numbering

Bulleted and numbered lists can be used in your documents to:

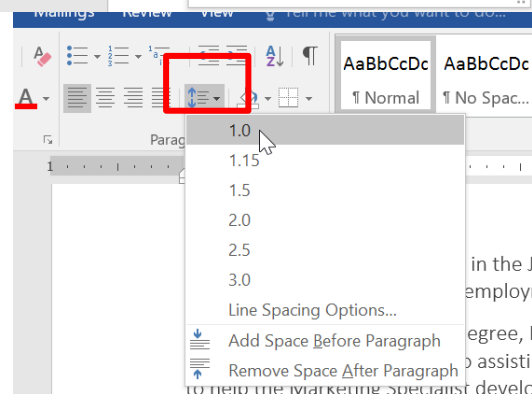
- Outline, arrange & emphasize text.
- Bullets & Numbered lists are located on the **Home** tab on **Paragraph** group.



Line and Paragraph Spacing

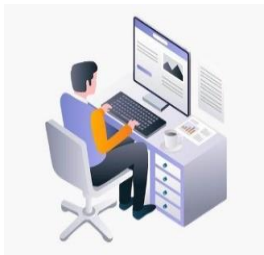
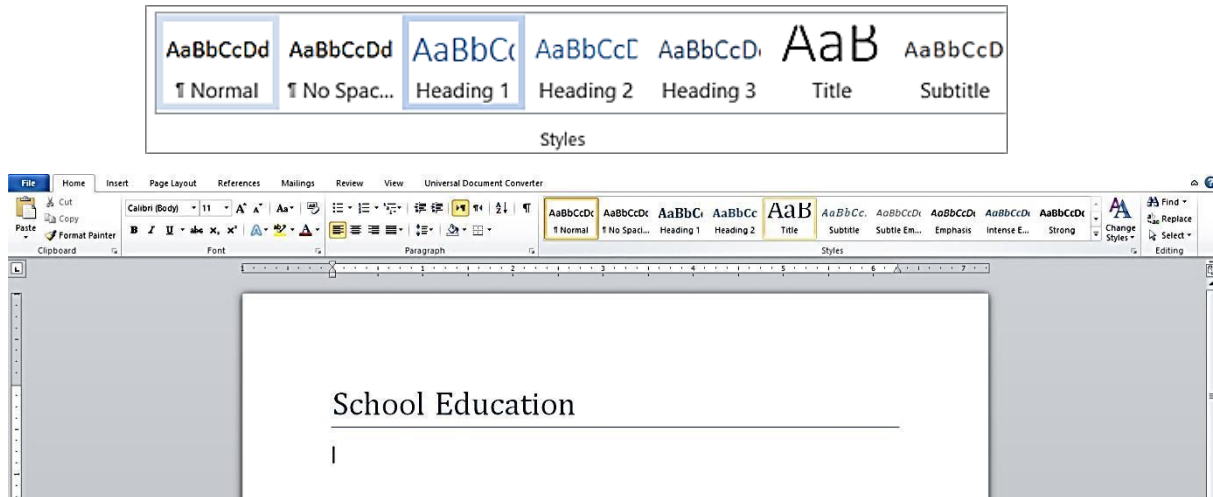
Line and paragraph spacing helps you to adjust spaces between lines and in paragraphs.

- On the **Home** tab, click the **Line and Paragraph Spacing** command, then select the desired line spacing.



Applying Headings

You can create headings in Microsoft Word documents by applying Word's built-in heading styles (such as Heading 1 or Heading 2). After applying these headings you can change different attributes i.e color, size, font etc. to apply a heading style. Simply select the text you want to format and click on desired heading style located on **Style** group on **Home** Tab.



Hands on Practice

Apply the following text formatting on the given text.

HRMS: The government of Punjab continuously seeks innovative solutions that can help to improve school education department by developing e-Transfer system for public school teachers across Punjab.

- Set Text size 12.
- Font color Green.
- Make "government of Punjab" bold.
- Text center aligned.
- Make HRMS as heading.



Self-Assessment

After completing this learning session, evaluate your own Microsoft Word proficiency.

ICT Skills	Yes	No
I am able to open Microsoft Word using various methods.		



Beginners ICT Guide for Educators and School Leaders

I understand the interface of Microsoft Word and identify different tabs.		
I am proficient in inserting text into a document.		
I can select and replace text.		
I am able to apply Bold, Italic, Underline text.		
I can change Font size.		
I am proficient in applying alignments.		
I can apply bullets and numbering.		
I am able to adjust line & paragraph spacing.		
I can apply headings to a Word document.		



SESSION-2 File Management

90 Minutes



Learning Objectives:

Upon completing this session, participants will be able to proficiently demonstrate the following Microsoft Word skills

- **Saving a document:**
 - Different ways of saving a document.
 - Difference between Save & Save As.
 - Saving file to a specific location.
- **Opening a Document:**
 - Use of **Open** in **Backstage view**.
 - Open an already saved document.
- **Control Buttons:**
 - Understand the use of control buttons.
 - Minimize, Restore down/Maximize, Close

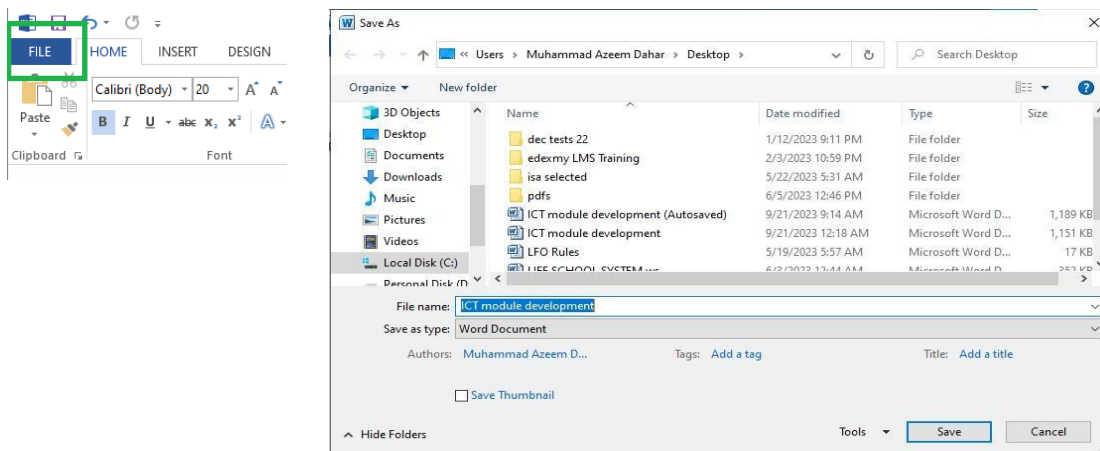
SESSION-2 File Management

90 Minutes

It is important to **Save** your document, so you may able to use it again in future.

Steps to save your document

- Click **FILE** > **Save**
- **Save As** dialog Box appears.
- Select the location where you want to save the document using the **drop-down menu**.
- Enter a **name** for the document.
- Click the **Save** Button.



Difference between Save and Save As

The key difference between **Save** and **Save As** is that Save allows you to update a previously saved file with new content, whereas Save As allows you to save a new file or an existing file to a new place with the same or different name.



Opening a Word Document

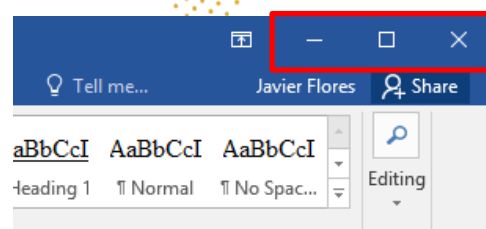
You can open already saved document using **Open** command.

- Go to **File**
- Then click **Open**
- Select the desired file to **open**.



Control Buttons

- Minimize
- Restore down/Maximize
- Close





There are three control buttons located on the top right side of the office window.

Minimize Button: When you left click on this button the window hides itself on the taskbar; which by default is located at the bottom of the screen.

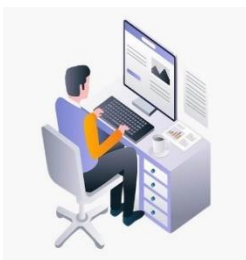
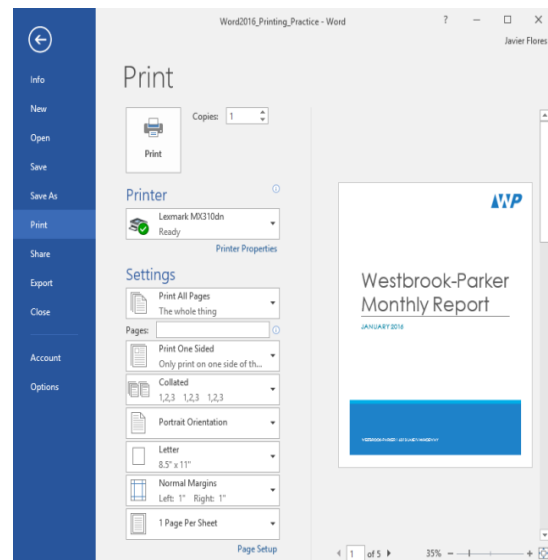
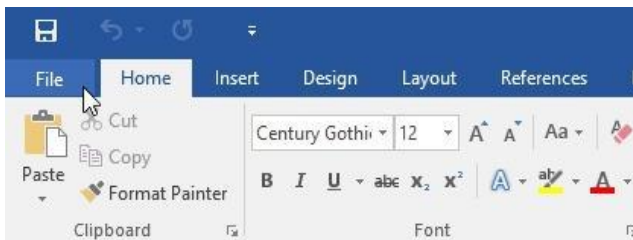
Restore Down: This button reduces the size of the Word window. When you click the Restore Down button again it turns into the Maximize button. The Maximize button fills your screen with the Word window.

Close Button: Close button is used to close the word document.

Printing a Document

Once you've created your document, you may want to **print** it to view and share your work **offline**.

- Select the **File** tab. **Backstage view** will appear.
- Select **Print**. The **Print** pane will appear.
- Select the desired **printer**.
- After entering the desired number of copies click **Print**.



Hands on Practice

Open a Blank document in MS Word and type "Quaid-e-Azam Academy for Educational Development" and perform following actions.

- Save the file.
- Save As file with another name.
- Print the file.
- Open any already saved file using **Open** command.



Self-Assessment

After completing this learning session evaluate your own Microsoft Word proficiency.

ICT Skills	Yes	No
I am able to save document.		
I can save the file with another name using Save As after changes.		
I am able to understand the difference between Save and Save As.		
I am proficient in printing a document.		
I can effectively use control buttons (Minimize, restore down/maximize, close)		

SESSION-3 Insert Tab

90 Minutes



Learning Objectives:

Upon completing this session, participants will be able to proficiently demonstrate the following Microsoft Word skills

- **Add Tables:**
 - Explain the purpose and importance of tables.
 - Create tables to organize data and information.
 - Customize table properties, including the number of rows and columns.

- **Insert Pictures:**

SESSION-3 Insert Tab

90 Minutes

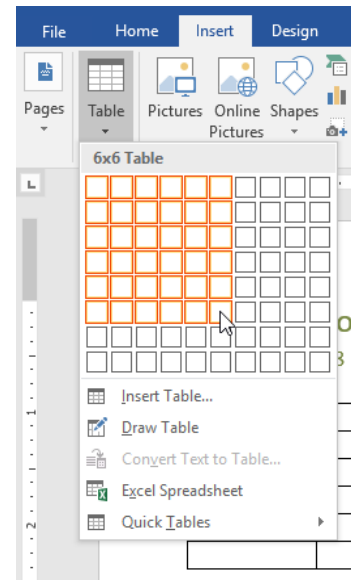
Microsoft Word provides you the facility to insert tables, pictures, clip arts, shapes, charts, headers & footers etc. in a document.

Adding Tables

Tables can be used to organize any type of content, whether you're working with text or numerical data. In Word, you can quickly insert a **blank table** or convert **existing** text to a **table**.

To insert a blank table:

- Place the insertion point/cursor where you want the table to appear.
- Navigate to the **Insert** tab, then click the **Table** command and select the number of **columns and rows** you want from drop down menu.
- Click the grid to **confirm** your selection, and a table will appear.
- To **enter text**, place the insertion point in any cell, then begin typing the text.



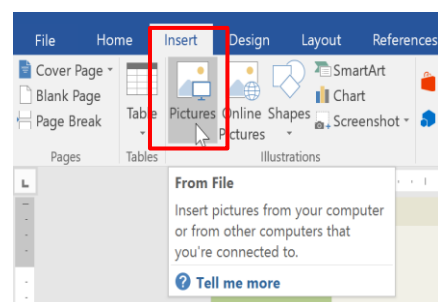
Monday	Tuesday	Wed				

Pictures

Adding **pictures** to your **document** can be a great way to **illustrate** important information and add **decorative accents** to existing text.

Insert a picture from a file/computer/mobile:

- Place the **insertion point** where you want the image to appear.
- Select the **Insert** tab on the **Ribbon**, and then click the **Pictures** command. The **Insert Picture** dialog box will appear.
- Select the folder to insert desired picture.

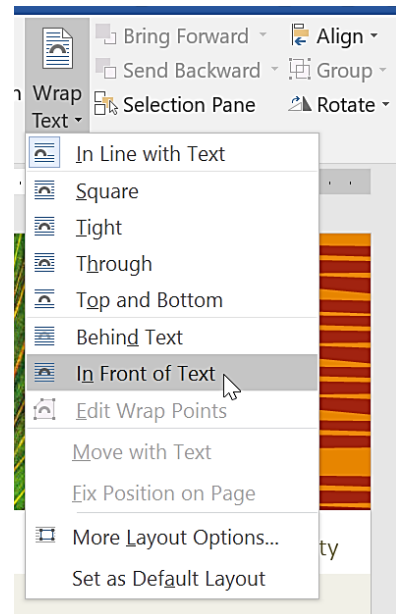




Text Wrapping

When you **insert** a picture from a file, you may notice that it's difficult to move it exactly where you want. This is because the **text wrapping** for the image is set to **In Line with Text**. You'll need to change the **text wrapping setting** if you want to move the image freely.

Different other options for **wrap text** available as show in given image.



Pictures Formatting

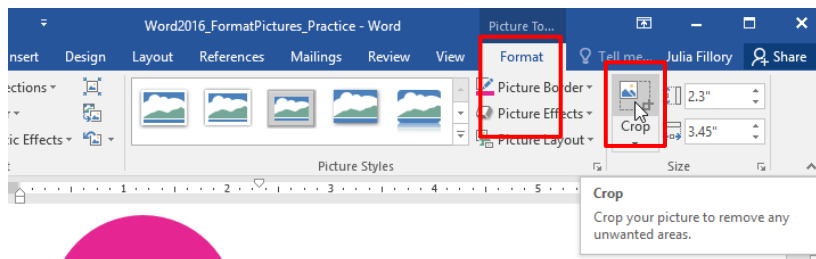
There are many ways to **format** pictures in Word. For instance, you can change:

- The **size or shape** of an image to better suit your document.
- You can also enhance its **appearance** using Word's image adjustment tools.

To crop an image

Select the image you want to crop. The **Format** tab will appear.

- From the **Format** tab, click the **Crop** command.
- **Cropping handles** will appear on the sides and corners of the image.
- Adjust the size and to confirm, click the **Crop** command again. The image will be cropped.



Making adjustments

image

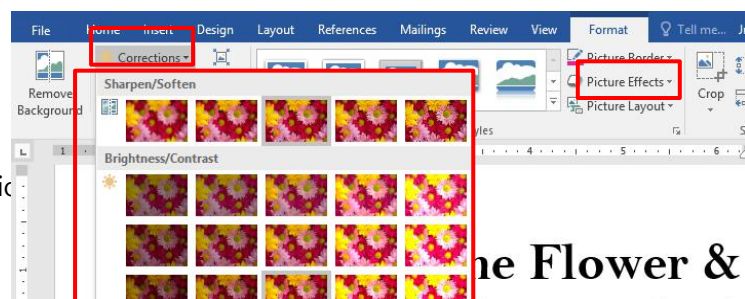
With Word's image adjustment tools, you can easily change properties like

- Color
- Contrast,
- Saturation
- Tone

Word also offers built-in **picture styles**, which can be used to add a frame, drop shadow, and other predefined effects.

Corrections

This option helps to adjust:





- sharpness or softness
- brightness and contrast

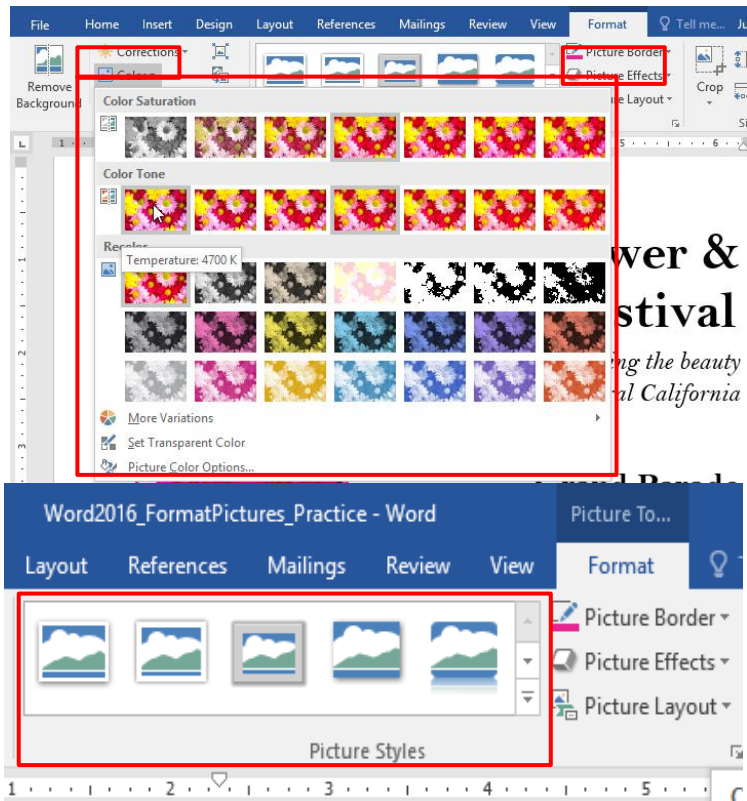
Color

This option helps to adjust:

- Image saturation
- Tone
- Coloring (Recolor)

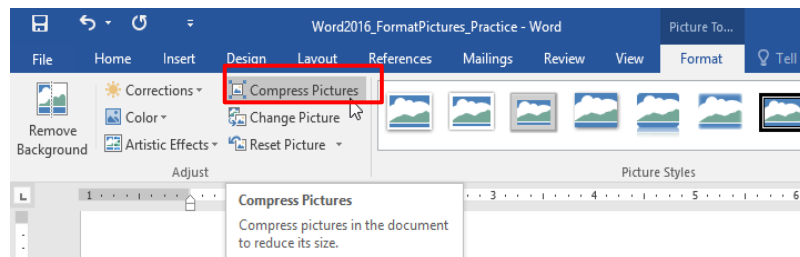
Picture Styles group:

This group contains different predefined styles that make image formatting even easier. Picture styles are designed to frame your image without changing its basic settings or effects.



Compressing pictures:

If you plan to email a document that contains pictures, you'll need to monitor its **file size**. Large, high-resolution images can cause your document to become very large, which may make it difficult to attach to an email. In such case **Compress Picture** is best option you can compress your pictures to reduce overall size of document.



Qua

Hands on Practice

Create a new blank document and add a table of 3 x 3 as:

DATA OF OUT OF SCHOOL CHILDREN



Self-Assessment

After completing this learning session, evaluate your own Microsoft Word proficiency.

ICT Skills-Microsoft Word	Yes	No
I am able to insert tables in a document with text.		
I can apply different formatting on text within the table.		
I am able to insert image from computer/mobile.		
I can adjust picture color, tone and brightness etc.		
I can compress picture when needed.		



Learning Objectives:

Upon completing this session, participants will be able to proficiently demonstrate the following Microsoft Word skills

- **Headers and Footers:**
 - Explain the uses of headers & footers in a document.
 - Understand how to add header & footer in a document.
- **Page Number:**
 - Add page number to any document.
- **Text Boxes:**
 - Understand the use and importance of text boxes.
 - Add text boxes to any image of the document.
 - Apply different formatting on inserted text box.
- **WordArt:**
 - Understand the effective use of WordArt.
 - Add WordArt in any document.

SESSION-4 Insert Tab

90 Minutes

Header & Footers

The **header** is a section of the document that appears in the top margin, while the **footer** is a section of the document that appears in the bottom margin.

Headers and footers generally contain additional information such as **page numbers, dates, an author's name or school name**. Text entered in headers & footers will appear on **each page** of the document.

Steps to add Header

- Double click on the top of your document header will be added.

OR

- You can also add it from **Header & Footer** group located on **Insert** tab.

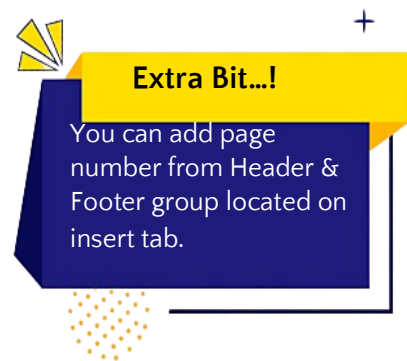


Steps to add Footer

- Double click on the bottom of your document header will be added.

OR

- You can also add it from **Header & Footer** group located on **Insert** tab.

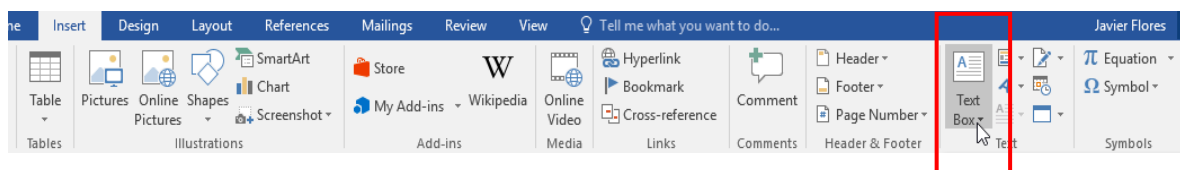


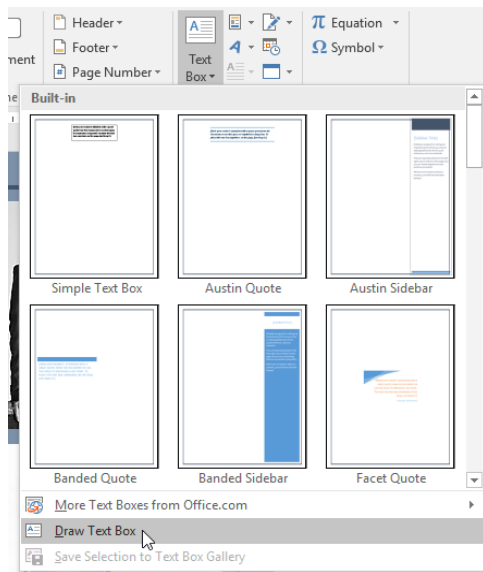
Text Boxes

Text boxes can be useful for drawing attention to specific text. They can also be helpful when you need to move text around in your document.

Steps to add text boxes:

- Select the **Insert** tab, and then click the **Text Box** command in the **Text** group.
- A drop-down menu will appear. Select **Draw Text Box**.
- Click and drag anywhere on the document to create the text box.
- Now you can add text whatever you want.





To move a

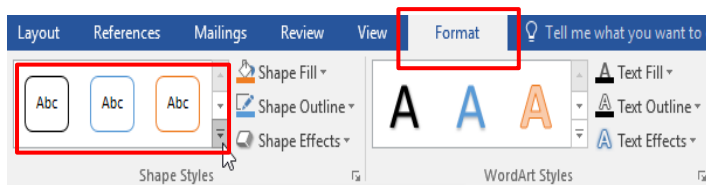
Text Box

- Click the text box you want to move.
- Hover the mouse over one of the edges of the text box. The mouse will change into a cross with arrows.
- Click and drag the text box to the desired location.

To change the shape style

Choosing a **shape style** allows you to apply preset colors and effects to quickly change the appearance of your text box.

- Select the text box you want to change.
- On the **Format** tab, click the **More** drop-down arrow in the **Shape Styles** group.
- Select the **style** you want to use from drop down menu.



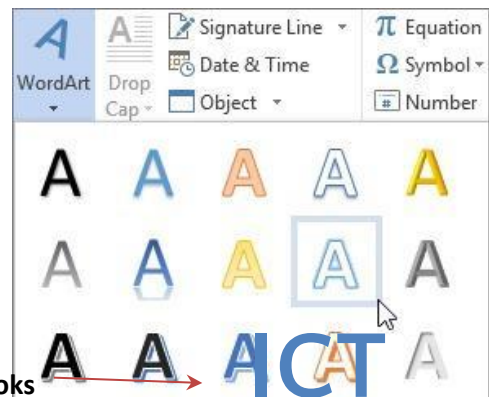
WordArt in MS Word



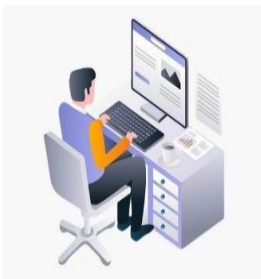
WordArt is designed to allow you make your text more attractive with special effects.

Steps to insert WordArt

- Place the cursor where you want to insert WordArt
- Select the Insert tab
- In Text group click the 'WordArt' button
- WordArt menu appears;



How it looks



Hands on Practice

Create a new blank document OR open any already saved document. Apply following actions on the document:

- Add header and footer
- Write "ICT Skills" in Header
- Write "QAED Punjab, Lahore" in footer.
- Add page number.
- Add a text box & apply different formatting on it.
- Insert a WordArt.



Self-Assessment

Use these self-assessment statements to evaluate your own Microsoft Word proficiency.

ICT Skills	Yes	No
I can add header & footer in a document.		
I can add page number.		
I am able to insert text box in a document.		
I can adjust text box and apply different formatting on text box.		
I can insert WordArt in a document.		

SESSION-5 Layout Tab

90 Minutes



Learning Objectives:

Quaid-

Upon completing this session, participants will be able to proficiently demonstrate the following Microsoft Word skills



SESSION-5 Layout Tab

90 Minutes

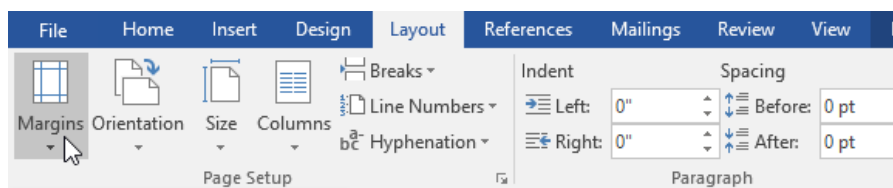
Page Layout

Word offers a variety of page layout and formatting options that affect how content appears on the page. You can customize the **page orientation**, **page size**, and **page margins** depending on how you want your document to appear.

Page Margins



A **margin** is the **space** between the text and the edge of your document. By default, a new document's margins are set to **Normal**, which means it has a **one-inch space** between the text and each edge.



Depending on your needs, Word allows you to change your document's margin size.

To set **Margins**:

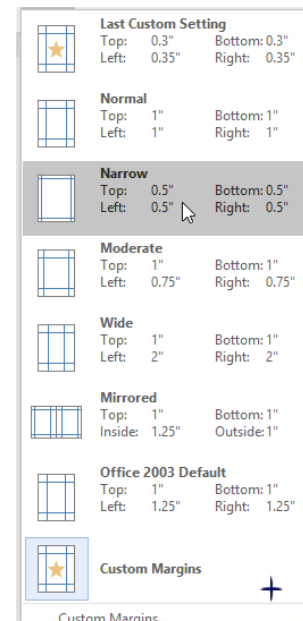
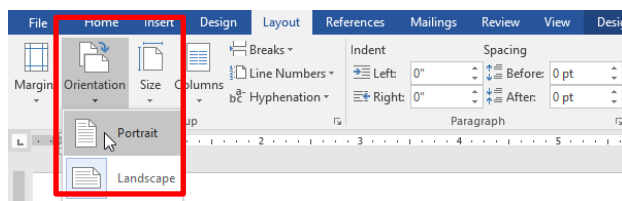
- Select the **Layout** tab, and then click the **Margins**.
- A **drop down menu** will appear, select your desired margin.

Word also allows you to customize the size of your margins.

Page

Word offers two page orientation options:

Landscape and **Portrait**. Landscape means the page is oriented **horizontally**. Portrait means the page is oriented **vertically**.



Extra Bit...!

Your Salary slip is in **Portrait** while our Staff Statement is in **Landscape**.

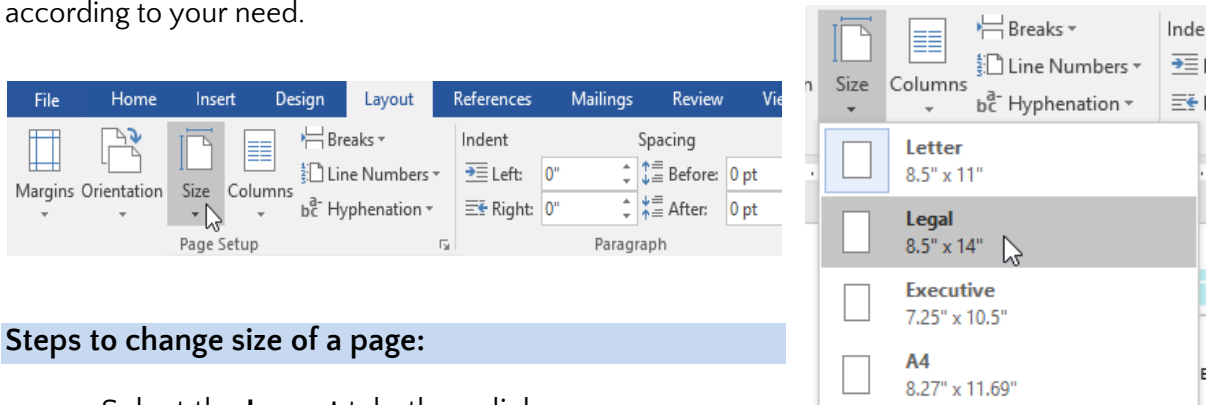


Steps to change orientation of page

- Select the **Layout** tab.
- Click the **Orientation** command in the Page Setup group.
- A drop-down menu will appear. Click either **Portrait** or **Landscape** to change the page orientation.

Page size

By default, the **page size** of a new document is 8.5 inches by 11 inches. You may change it according to your need.



Steps to change size of a page:

- Select the **Layout** tab, then click the **Size** command.
- A drop-down menu will appear. The current page size is highlighted. Click the desired **predefined page size**.

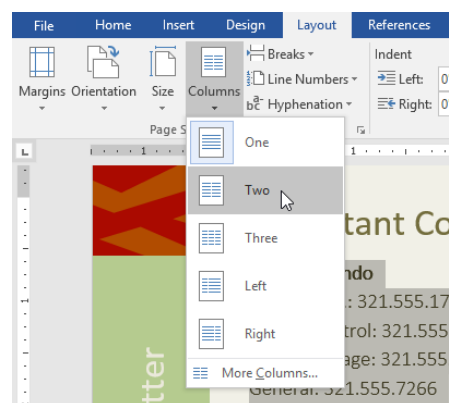
Adding Columns

Sometimes the information you include in your document is best displayed in **columns**.

We use columns in different scenarios like

- Newspaper articles
- Newsletters
- Flyers

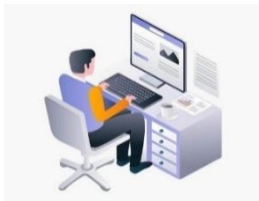
Word also allows you to adjust your columns by adding **column breaks**.





To add columns to a document

- Select the **Layout** tab, then click the **Columns** command. A drop-down menu will appear.
- Select the number of columns you want to create.
- The selected text or document will format into columns.



Hands on Practice

Create a new blank document OR open any already saved document. Apply following actions on the document:

- Set Page Margins to Narrow.
- Set Page Size to Legal.
- Adjust Orientation Landscape.
- Split the page into two columns.



Self-Assessment

Use these self-assessment statements to evaluate your own Microsoft PowerPoint proficiency after completing the learning session.

ICT Skills	Yes	No
I can set margins in a document.		
I am able to differentiate page orientation.		
I can adjust page size.		
I can add columns in a document.		
I am able to print a document.		



Microsoft PowerPoint

SESSION- 6 Introduction to PowerPoint

90 Minutes

Learning Objectives:

Upon completing this session, participants will be able to proficiently demonstrate the following PowerPoint skills:

- **Opening Microsoft PowerPoint:**
Open Microsoft PowerPoint software on their computers.
Learn multiple methods to launch PowerPoint, including using the Start menu, taskbar, or a shortcut icon.



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- **Navigating the PowerPoint Interface:**
Accurately identify and label the key components of the PowerPoint interface screen.
Recognize and understand the functions of the Ribbon, Tabs, Slides Pane, and the Slide Sorter View.
- **Creating Text-Based Content:**
Demonstrate the ability to create text-based content on PowerPoint slides.
Learn how to insert text into placeholders and text boxes.
Achieve proficiency in basic text formatting options, including font size, style, and alignment.
- **Adding New Slides:**
Successfully add new slides to a PowerPoint presentation.
Understand how to choose different slide layouts based on their content requirements.
- **Inserting Images and shapes:**
Effectively insert images, shapes and word Art into PowerPoint slides,

Introduction to PowerPoint

Microsoft PowerPoint is a widely used computer program developed by Microsoft as part of the Microsoft Office suite. It is primarily designed for creating and delivering multimedia presentations. PowerPoint allows users to create slideshows that can incorporate text, images, graphics, charts, videos, and audio elements.

How I will use Microsoft PowerPoint as teacher or School leader?

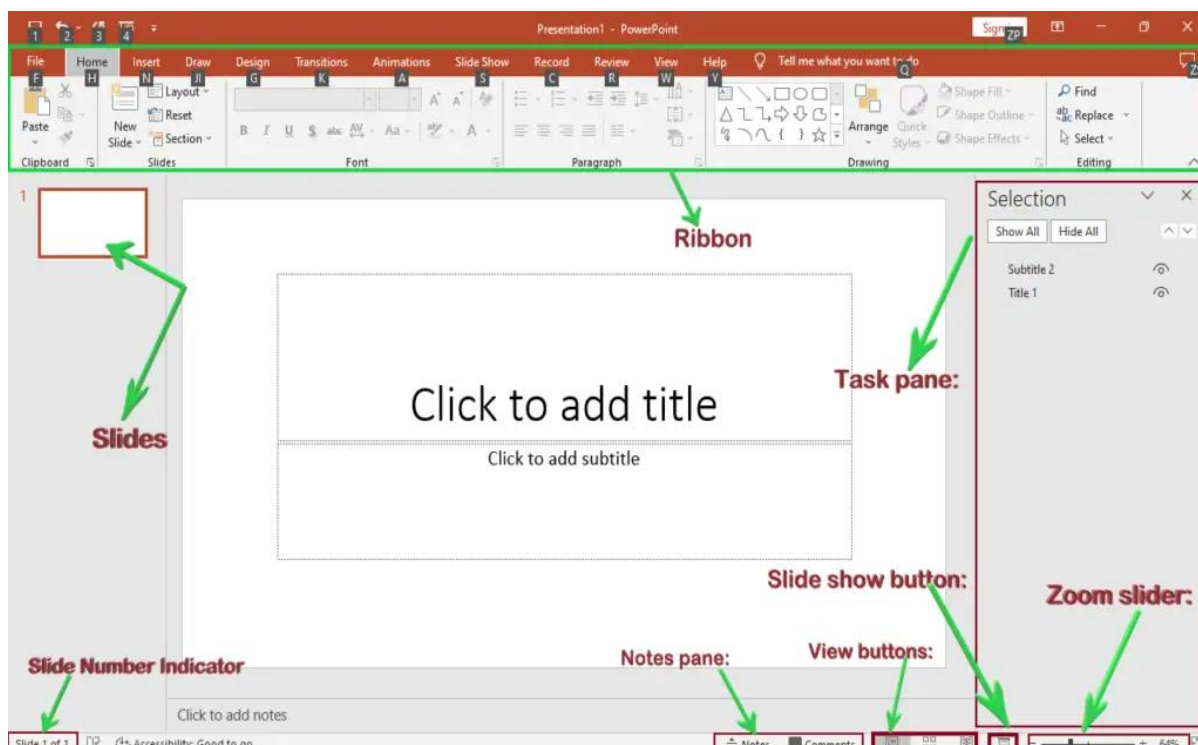
As Teachers: Microsoft PowerPoint can be a valuable tool for teachers and educators in various ways to enhance their teaching and engage students effectively through colourful content slides. It can also be used for online teaching.

As Head Teachers: Head Teachers/Principals can use Microsoft PowerPoint for staff meetings, school-based professional development (CPD) training sessions with staff, and to conduct awareness sessions for students. School leaders can also use PowerPoint to communicate the school improvement plan and highlighting improvements regarding organizational goals to official visitors

How to Launch Microsoft PowerPoint and Introduction of its first screen?

- Click on the Start Button: In the bottom-left corner of your screen
- Search for "PowerPoint": In the search bar, type "PowerPoint" and press Enter

Introduction to PowerPoint Interface (first screen)



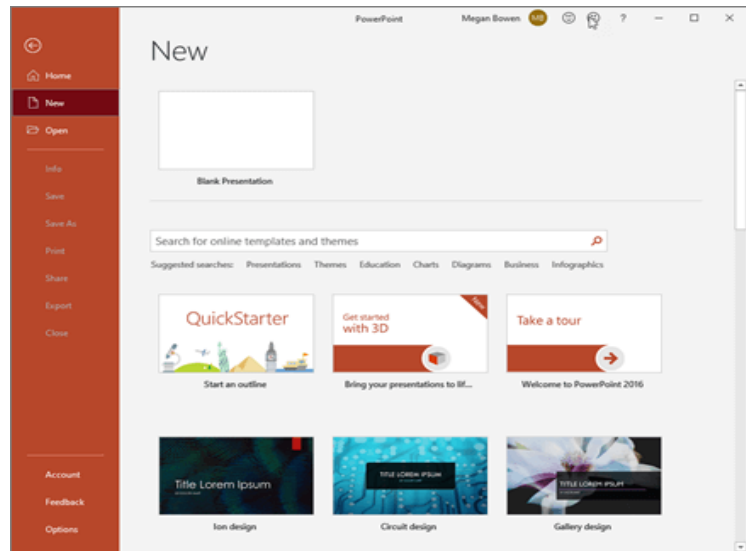
Ribbon	A toolbar at the top of the screen that provides access to most of the PowerPoint functions and features
Slides	The main area where you create your presentations.
Outline view	A view that displays a text outline of your presentation.
Slide sorter view	A view that displays thumbnails of your slides, allowing you to easily rearrange them.



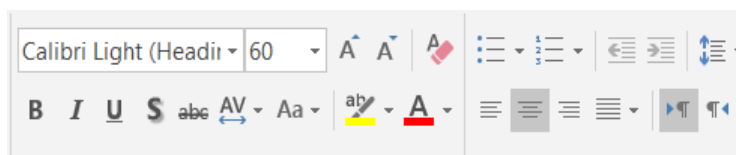
Notes pane	A section below each slide where you can add notes or comments for yourself or the presenter.
Task pane:	A floating window that provides access to various PowerPoint tasks and features.
View buttons	Allows you to switch between different views of your presentation (Normal, Slide Sorter)
Zoom slider	Allows you to adjust the magnification of your slides on the screen.

How to create a presentation?

1. Open PowerPoint.
2. In the left pane, select **New**.
3. Select an option:
 - To create a presentation from scratch, select **Blank Presentation**.
 - To use a prepared design, select one of the **templates**.



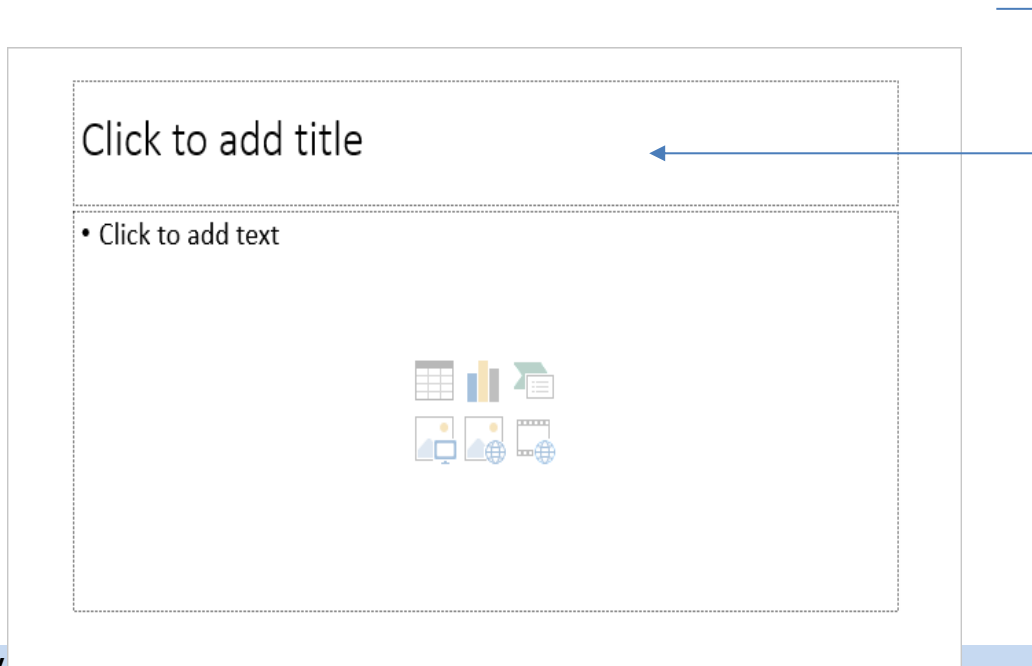
In Microsoft PowerPoint, we can use the text formatting commands and shortcut keys in the same way we have learned in Microsoft Word.





How to Adding text on slide

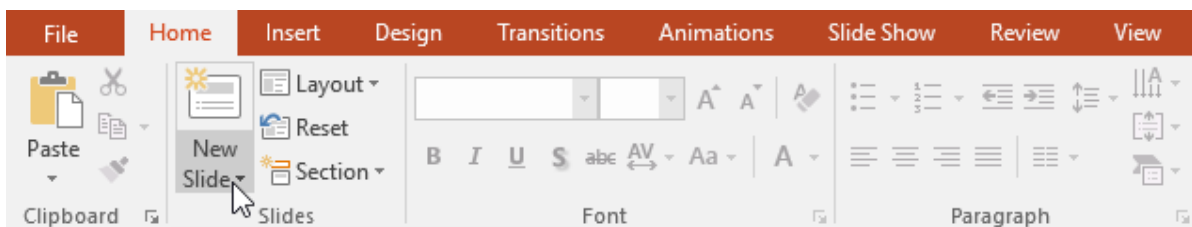
To write text on the slide click on the box on slide showing text “click to add title”



How to change font and text size on slide

Select the text, and then select one or more options from the **Font** section of the **Home** tab, such as **Font**, **Increase Font Size**, **Decrease Font Size**, **Bold**, **Italic**, **Underline**, etc.

How to add a new slide?



In the **Home** tab, in the **Slides** section, select **New Slide**.

How to add a slide layout?

In the **Slides** section, select **Layout**, and then select the layout you want from the menu.

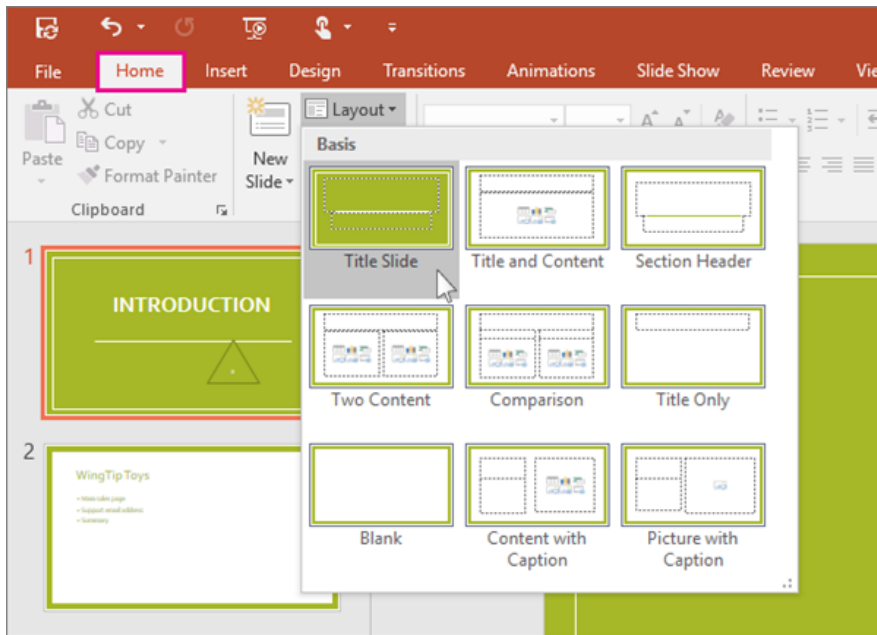


What is slide Layout?

Slide layout refers to the predefined arrangement and formatting of content elements on a slide. It determines where text, images, placeholders, and other objects should appear on the slide.



Microsoft PowerPoint offers a variety of slide layouts that we can use according to the content's needs for our slides.



How Add a picture, shape, and more objects on your slides?

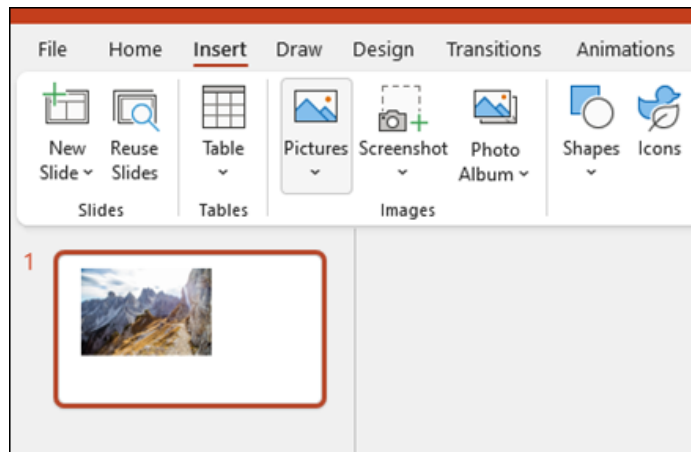
Go to the **Insert** tab.

To add a picture:

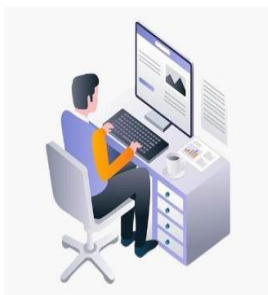
In the **Images** section, select **Pictures**.

In the **Insert Picture From** menu, select the source you want.

Browse for the picture you want, select it, and then select **Insert**.



Note for trainer: Once the participants have learned how to insert a picture on a slide, then guide them on how to move and resize the picture. Afterward, guide them about the other tools available on the Insert tab, such as shapes and WordArt, etc.



Hands on Practice

Create a PowerPoint Presentation with five slides on the any topic you have learnt in your promotion link training.



Self-Assessment

Use these self-assessment statements to evaluate your own Microsoft PowerPoint proficiency after completing the learning session.

ICT Skills –PowerPoint	Yes	No
I am able to open Microsoft PowerPoint using various methods.		
I am able to label and identify the key components of the PowerPoint interface.		
I understand the functions of the Ribbon, Tabs, Slides Pane, and the Slide Sorter View.		
I am proficient in inserting text into placeholders and text boxes.		
I can apply basic text formatting options, including font size, style, and alignment.		
I am capable of adding new slides to a PowerPoint presentation.		
I understand how to select appropriate slide layouts based on content needs.		
I can effectively insert images into PowerPoint slides		

SESSION- 7 Applying designs, Slide Transition & Animation 90 Minutes



Learning Objectives:

Upon completing this session, participants will be able to proficiently demonstrate the following PowerPoint skills

- **Design:**
 - Apply effective slide design to create visually appealing slides.



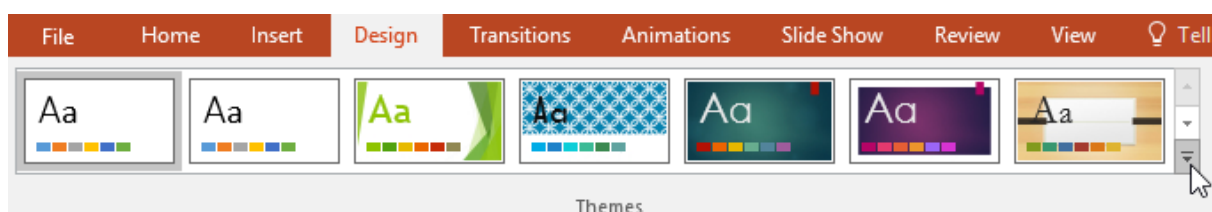
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- Become proficient in choosing suitable colors, fonts, and backgrounds for their presentations.
- **Transition:**
 - Capable of applying and customizing transition effects effectively in their PowerPoint presentations.
 - Control the timing and duration of transitions with precision.
- **Animation:**
 - Become skilled at applying entrance, exit, emphasis, and motion path animations to enhance slide content.
 - Become proficient in adjusting animation settings, including direction, speed, and triggers.
- **Slide Show:**
 - Confidently start and navigate PowerPoint slide shows.

What is slide design in PowerPoint

In Microsoft PowerPoint, the "Design" tab is one of the primary tabs located on the PowerPoint ribbon, and it is a powerful tool for customizing the overall design and appearance of your presentation. The Design tab offers various features and options to help you create visually appealing and cohesive slides. Here are some of the key uses of the Design tab:

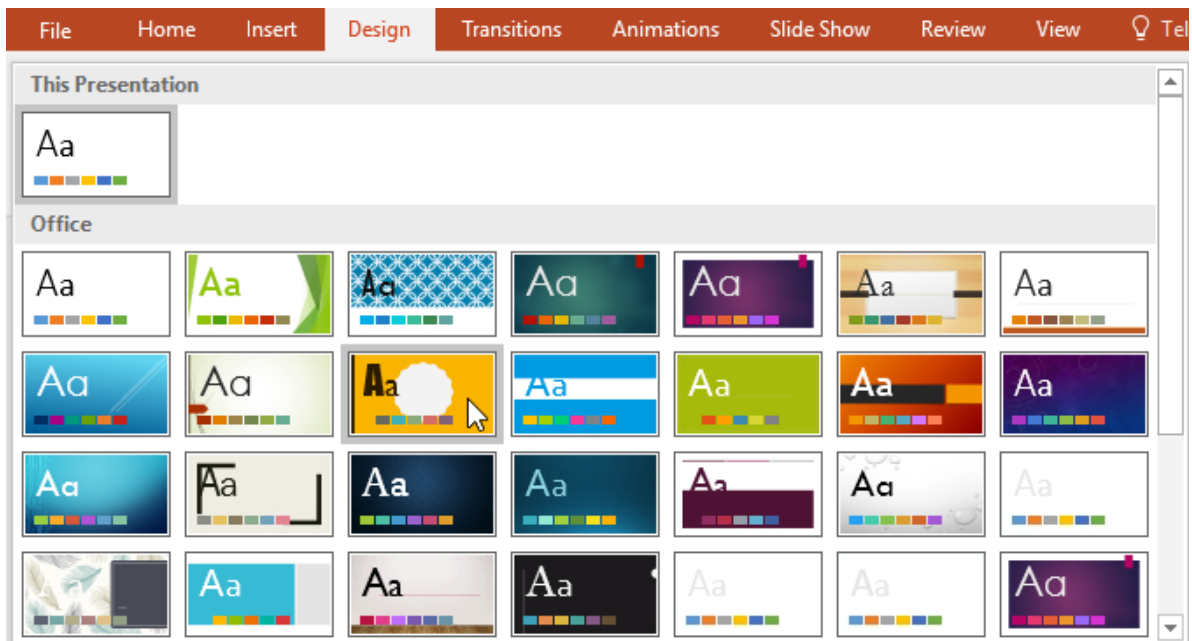
How to apply design on slide?



1. Select the **Design** tab.



2. In **Themes section**, choose any design of your choice



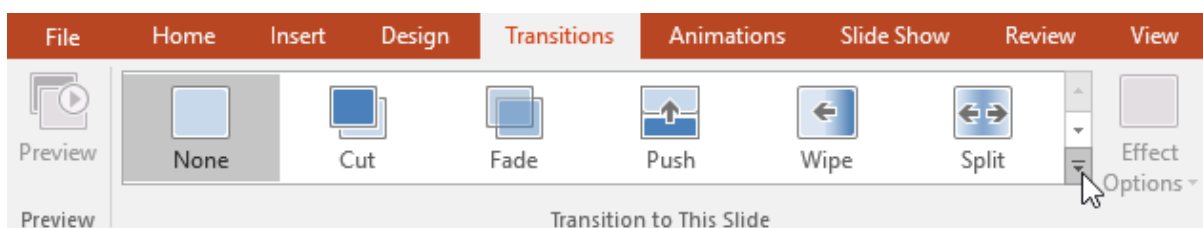
Once you've applied a theme, you can also select a **variant** for that theme from the **Variants** group. Variants use **different theme colors** while preserving a theme's overall look.

What is slide Transition?

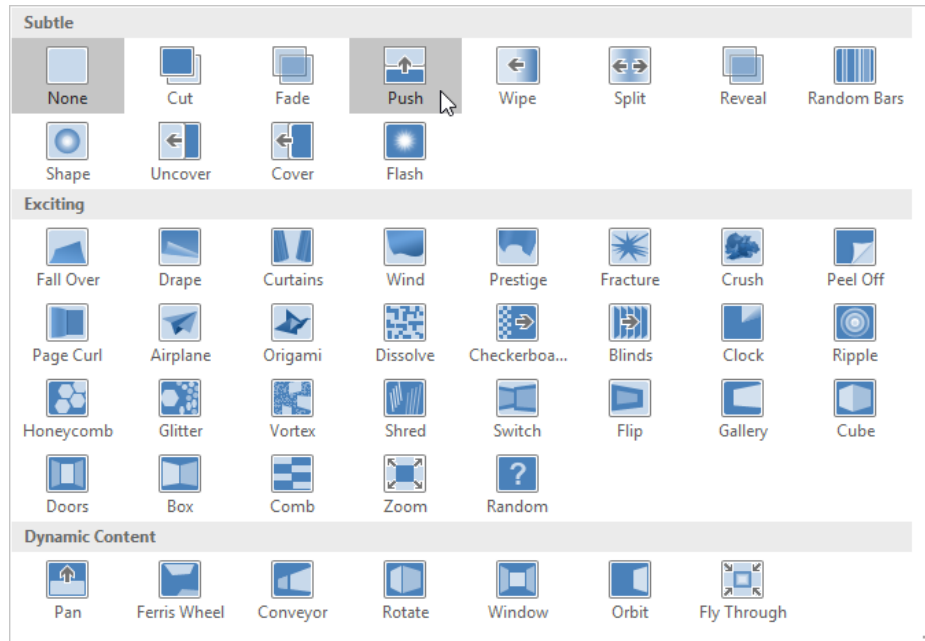
In Microsoft PowerPoint, a transition refers to a visual or animation effect that is applied to individual slides as they change from one to the next during a slideshow presentation. Transitions are used to add visual interest, create a smooth flow between slides, and make the presentation more engaging. They are a way to control how one slide exits the screen and how the next one enters.

How to Apply Slide transitions?

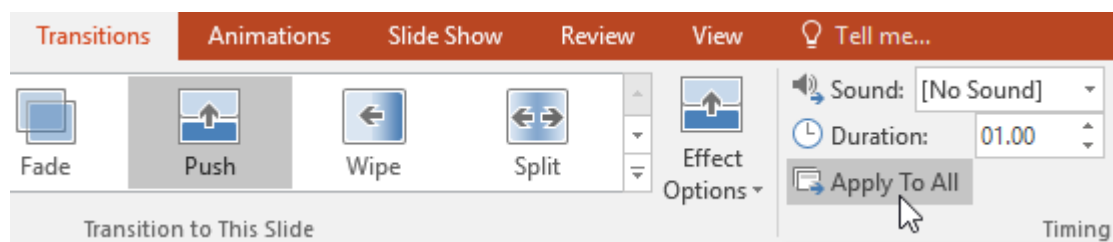
Select the slide on which you want to add a transition



On the **Transitions** tab, select the effect you want to apply on your slide. There are **three categories** of unique transitions to choose from, **subtle, exciting, dynamic content**

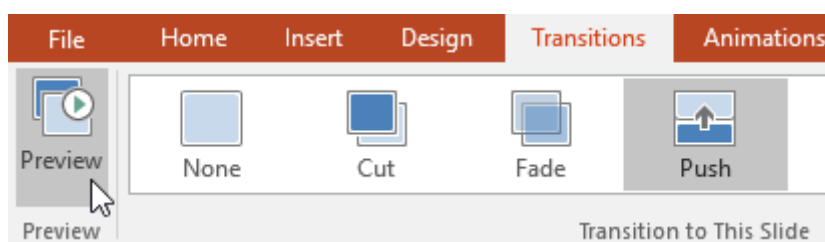


To apply same transition to all the slides, select **Apply to All**



To remove the transition effects from slide, select **None** from the ribbon

To preview the transition effects on slide, click on **preview**



Animation effects on text and objects

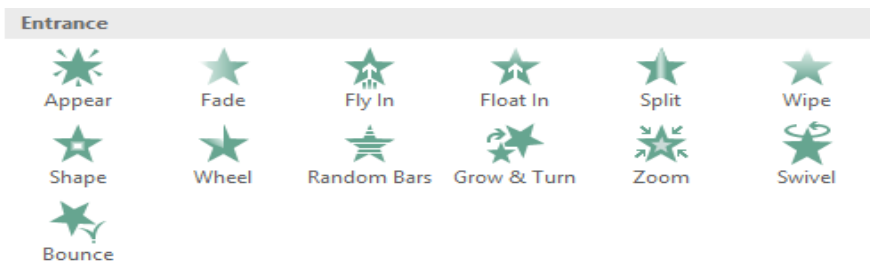
In Microsoft PowerPoint, animation refers to the process of adding movement or dynamic effects to individual elements on a slide, such as text, images, shapes, and other objects. Animations are used to make a presentation more visually engaging, illustrate concepts, and emphasize key points. They can bring elements onto the slide, make them exit, emphasize them, or create more complex movements and transformations.

Types of animation effects

There are several animation effects, you can select according to your choice, they are organized into four types.

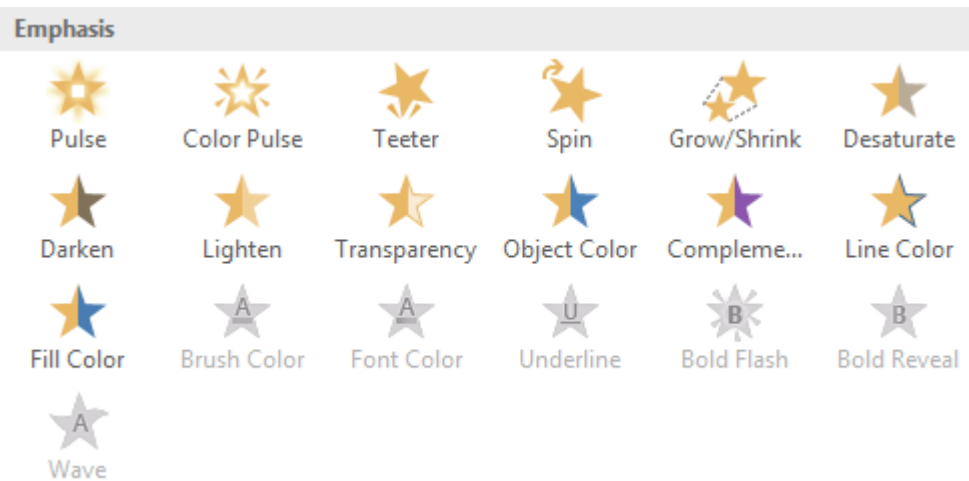


Entrance: This group of animation effects controls how the object enters the slide.



Emphasis:

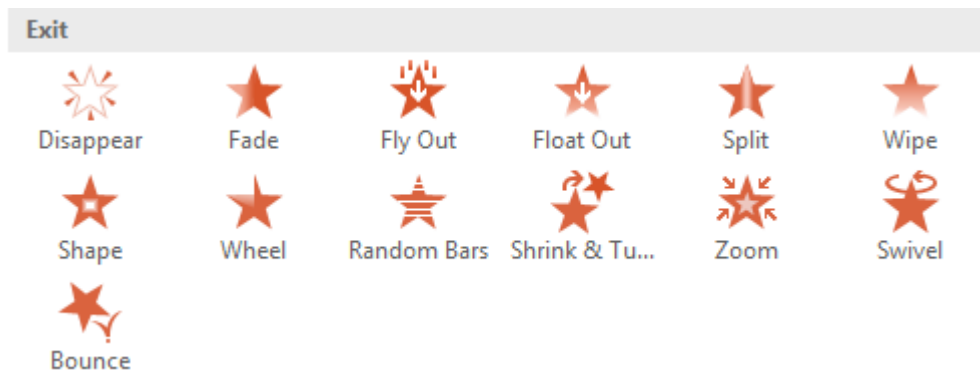
These animations occur while the object is on the slide, often triggered by a **mouse click**



Exit:

animation controls how the object exits the slide.

This group of



& these

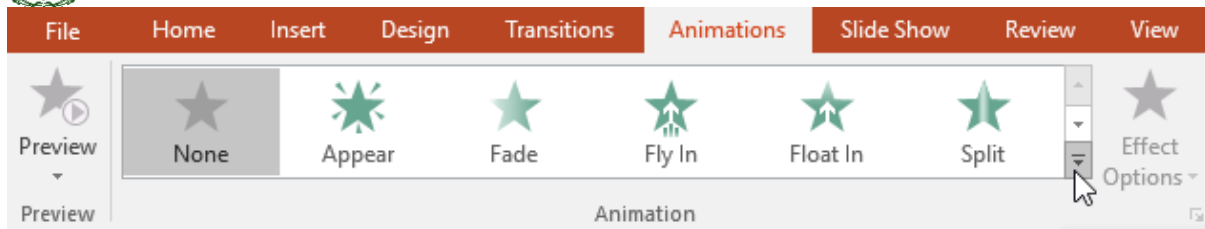
similar to **Emphasis** effects, except the object moves within the slide along a predetermined path, like a **circle**.

Motion Path: are

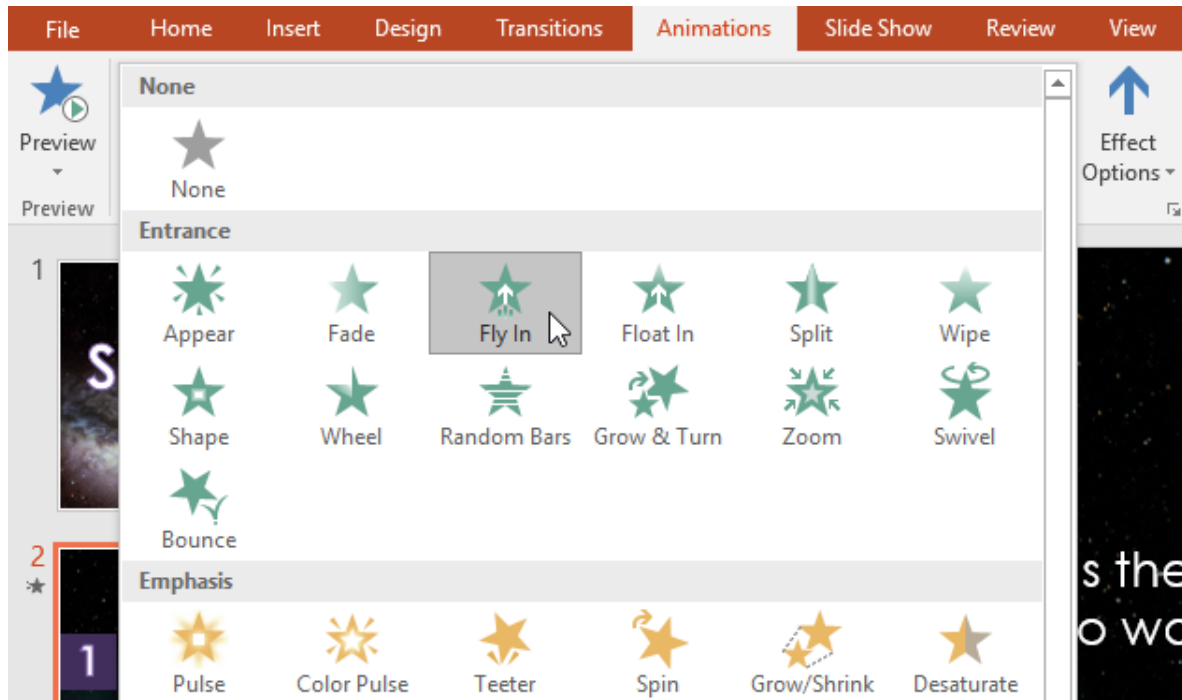


How to apply animation effects?

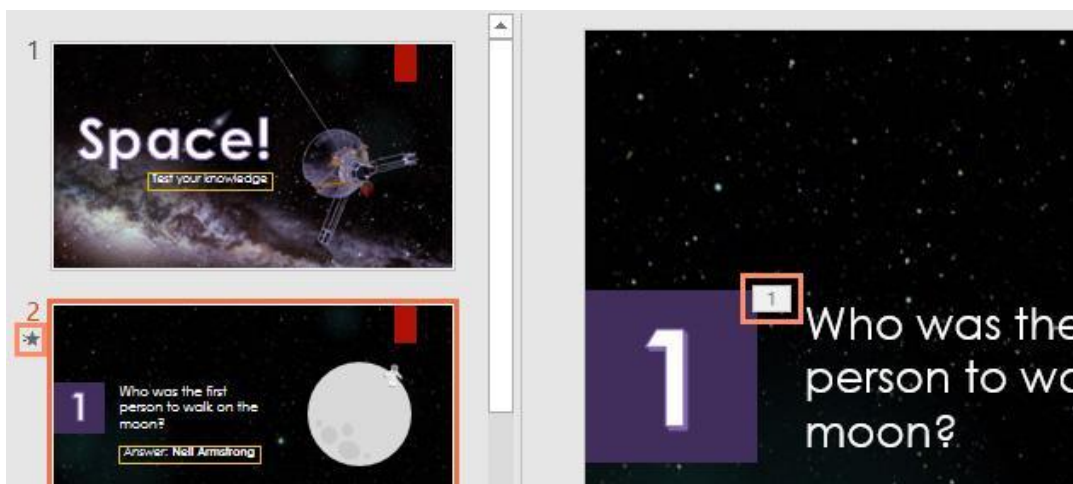
To animate text or objects on a slide: Select the text or object you want to animate.



On the **Animations** tab, click on the drop-down menu to see all four type of animation effects. Then select the animation you want to apply from the drop-down box.



The effect will apply to the object on the slide.



Change on the slide after animation:



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After the animation, the object will have a small **number** next to it to show that it has an animation. In the Slide pane, a **star** symbol also will appear next to the slide.

To remove the transition effects

Select the small **number** located next to the animated object.
Then Press the **Delete** key from keyboard. The animation will be deleted.

Slide show of the presentation:

In Microsoft PowerPoint, a slide show is like a digital, interactive storybook made up of individual pages called 'slides.' These slides appear on the screen one after the other in a specific order. A slide show is typically used for presenting information, ideas, or content in a visual and sequential manner.

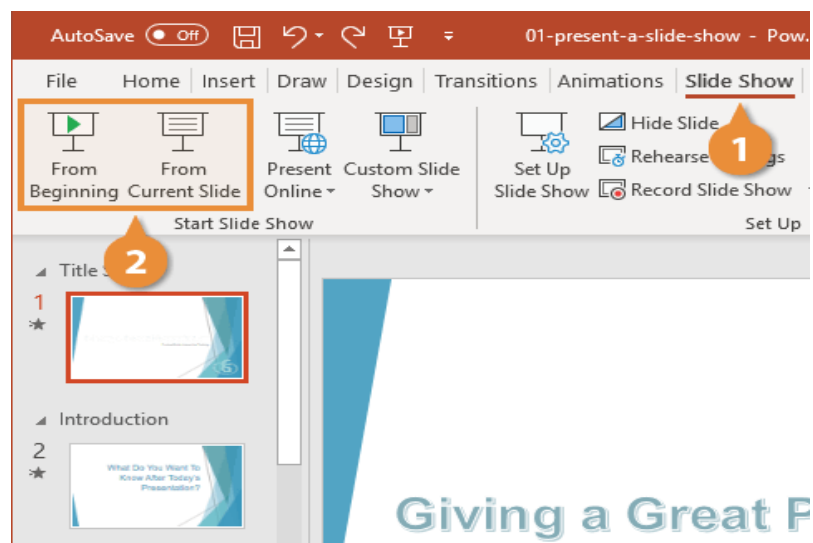
How to run slide show in PowerPoint?

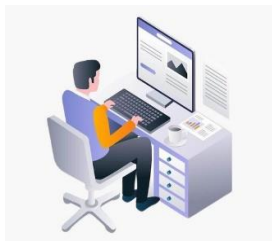
Select "**Slide Show**" Tab: Go to the "Slide Show" tab on the PowerPoint ribbon, located at the top of the application window.

Start the Slideshow: In the "Start Slide Show" group, you have several options:

From Beginning: Click "From Beginning" to start the slideshow from the first slide.

From Current Slide: If you want to start the slideshow from the slide you're currently on, click "From Current Slide."





Hands on Practice:

Create a PowerPoint Presentation and apply design, slide transition, animation on the slides and run slide show from beginning.



Self-Assessment

After completing this session, use these self-assessment statements to evaluate your own Microsoft PowerPoint proficiency.

ICT Skills-PowerPoint	Yes	No
I can apply effective slide design to create visually appealing slides in my presentations.		
I consistently choose appropriate colors, fonts, and backgrounds that enhance the overall design of my slides.		
I am proficient in applying and customizing transition effects to create a seamless flow between slides.		
I can confidently control the timing and duration of transitions to match the content and pace of my presentations.		
I am skilled at using entrance, exit, emphasis, and motion path animations to enhance the visual appeal of my slides.		
I am able to start and navigate PowerPoint slide shows with ease.		
I effectively use interactive elements like hyperlinks and action buttons to engage and guide the audience during presentations.		



Microsoft Excel



Session 8 – Introduction to MS Excel

90 Minutes



Session Learning Objectives

After completion of this session, the participants will be able to

- **Opening Microsoft Excel and Layout Introduction:**
 - Launch MS Excel using different methods including Using Shortcut, Start Menu, etc.
 - Get familiarized with MS Excel Window elements.

- **Saving, Opening and Converting the Excel File**
 - Launch a new MS Excel File, save it at their desired location
 - Convert Excel into a PDF File.

- **The concept of Cells, Rows, Columns, etc...**
 - Know what is cell, Rows and Columns in MS Excel and how this work.
 - Learn how to enter and manage data into a sheet.

- **Difference between Excel Workbook and Sheet**
 - Learn about the difference between Excel workbook and sheet.
 - Learn how to insert multiple sheets in an existing workbook using the plus sign.

Microsoft Excel

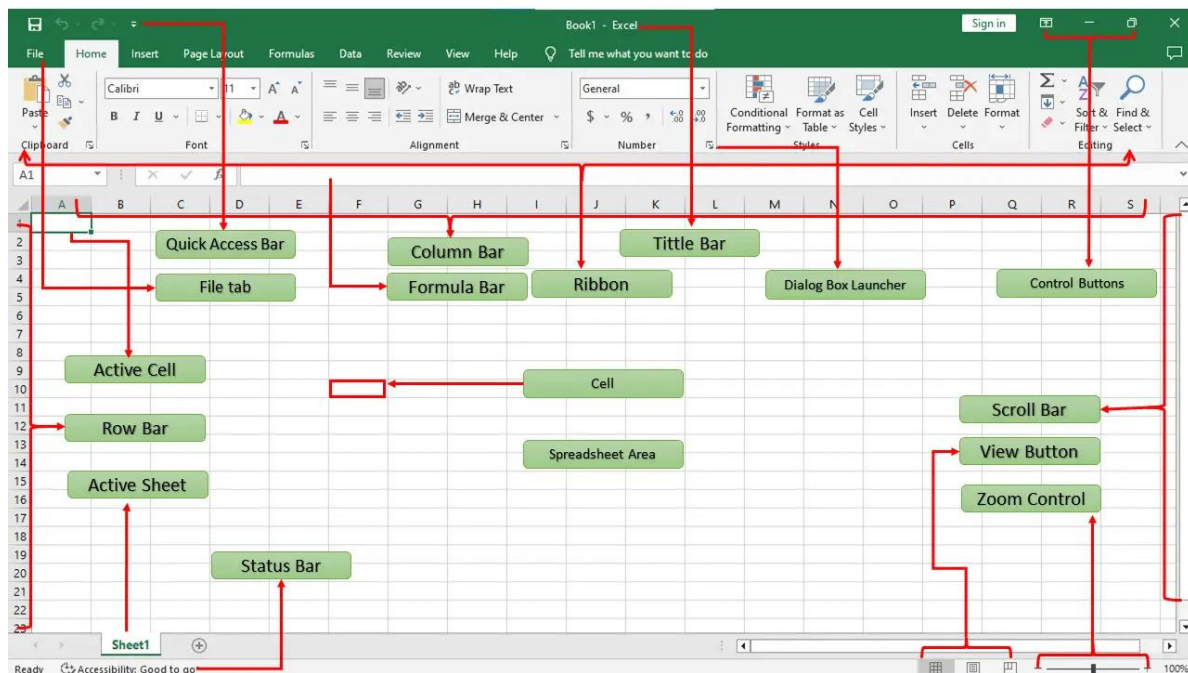
Microsoft Excel is powerful spreadsheet software widely used for data analysis, calculations, and organization.



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It allows users to create, edit, and manipulate data in a grid format of rows and columns (and each intersection is called cell). Excel is known for its functions and formulas, making it ideal for tasks like budgeting, data visualization, and financial analysis.

Layout of MS Excel Window



Upon opening MS Excel, we see a window like the above one that has different parts for different purposes and the details of the parts is given below.

- **Title Bar:** Displays the document name and provides window control options.
- **Formula Bar:** Allows viewing and editing of cell contents and formulas.
- **Ribbon:** Contains tabs with commands for various Excel functions.
- **Worksheet Area:** The main grid for data input, calculations, and charts.
- **Column Headers and Row Numbers:** Help reference specific cells in the grid.
- **Sheet Tabs:** Enable switching between different worksheets in the workbook.
- **Status Bar:** Provides information about document status and options like zoom.
- **Quick Access Toolbar:** It gives easy access to frequently used commands for improved productivity.
- **Cells:** The intersection of Column and row is called cell which is a basic unit of an excel sheet



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- **Name Box:** This contains the names of every cell comprising the column name and row number
- **Zoom Slider:** We can zoom in or zoom out the window to fit the contents on the screen

The use of MS Excel in Educational Institutes

The use of MS Excel in schools is widespread for tasks such as managing student data, creating result cards, analyzing educational data, and teaching students valuable spreadsheet skills, which are essential in various academic subjects and future careers. Few more usage of Excel are given below

- Grade book and Attendance Tracking
- Lesson Planning
- Data Analysis
- Budgeting and Expense Tracking
- Graphs and Charts for Visual Learning
- Student Records Management
- Timetables and Scheduling
- Interactive Learning Activities
- Financial Literacy
- Data Visualization Projects:

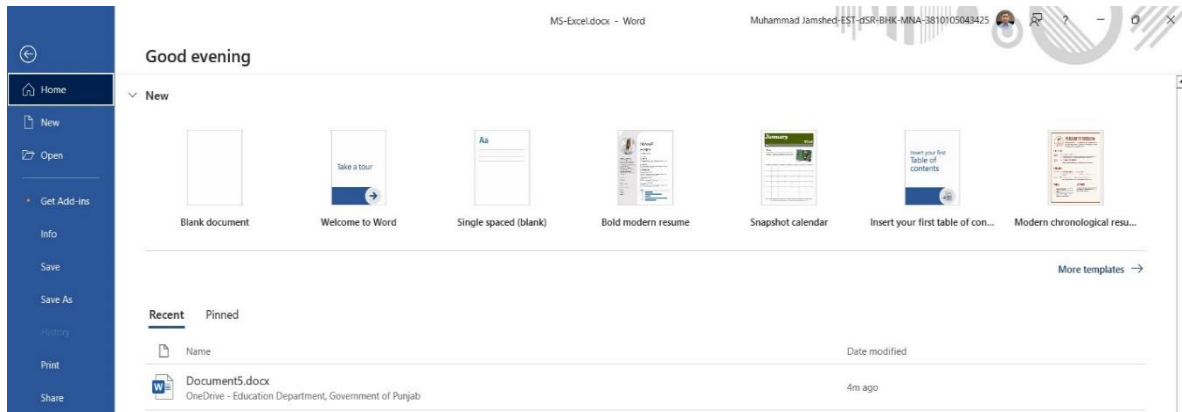
Difference between Excel Workbook and Sheet

An Excel **workbook** is like a file containing multiple Excel sheets (also called **worksheets**), **Workbooks** can be thought of as files, while sheets are the pages within those files.

File Handling in MS Excel

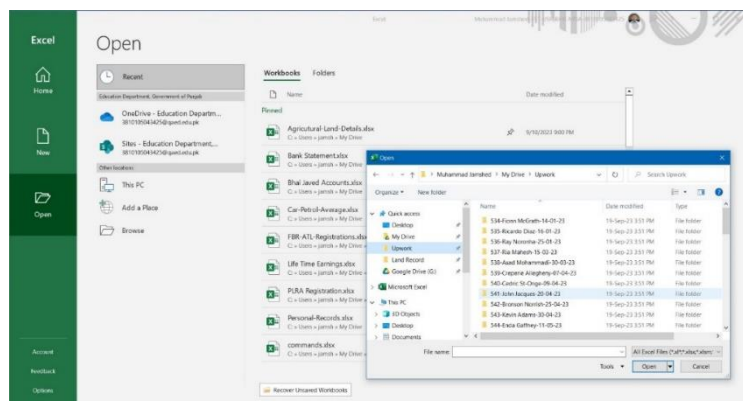
Create New Workbook

Whenever, MS Excel program opens, it automatically creates a worksheet with the name **sheet1**. However, you can create new workbook by navigating to **File >> New** option or you can create it using keyboard shortcut key **Ctrl + N**.



Open File

In MS Excel, the **"Open"** option allows you to open an existing Excel workbook or spreadsheet file from your computer or a connected storage device. This feature is used to access and edit previously created Excel files or import data from external sources into a new or existing Excel file. You can open a file by navigating **File >> Open** or the shortcut key **Ctrl + O** can be used for the same purpose.



Whenever you want to save your workbook on your computer or on cloud drive (Google or One Drive), you have to save it through **File > Save** name it from the Save dialog box and click save button. Save option is also used to save any unsaved changes made to the currently open workbook and by clicking **Save** will update the existing file with the changes. It doesn't prompt you to a new file name or location.

Save As file

"Save As" in Excel is an option that allows you to save the current Excel workbook with a new name, location or file format it also enables us to convert a different file format Including PDF,

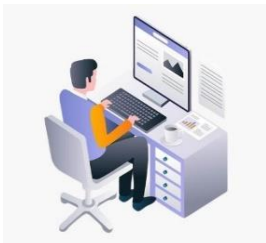


CSV or previous Excel versions. It is actually used to produce multiple copies of a workbook which is called reprographics.

Save or convert MS Excel Sheet to PDF

You can use the MS Excel to save or convert your files to **PDFs**, so that you can share them or print them using commercial printers.

- Click **File» Save As**.
- In the File Name box, enter a **name for the file**.
- In the Save as type list, click on the required format like PDF (*.pdf).
- To open in the selected format after saving, select the Open file after **publishing** check box.
- Click **Save**.



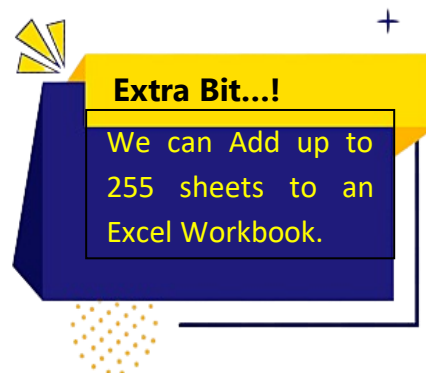
Hands on Practice

Create an Excel Workbook, enter some data and save it as pdf with your own name at Desktop.

The concept of worksheet

An **Excel worksheet** is a collection of rows and columns and the **intersection** of Column and row is known as Cell. Cells are used to record data and each cell is uniquely identified by its address. Columns are usually labeled with letters (A,B,C,...) while rows with numbers (1,2,3...).

Note: Number of sheets in an Excel Workbook can be increased or decreased as per requirement.





Adding a New Sheet to a Workbook

To add a new sheet to your existing workbook, open your workbook and click on “+” button in the bottom area as shown in the image.

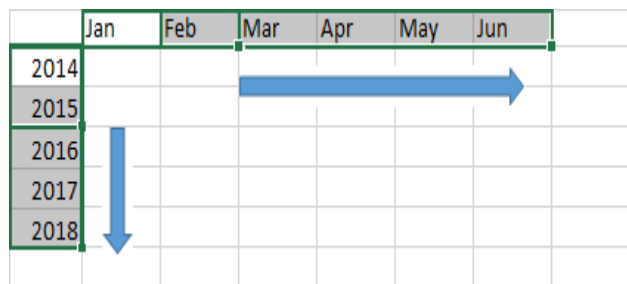


Entering data in MS Excel

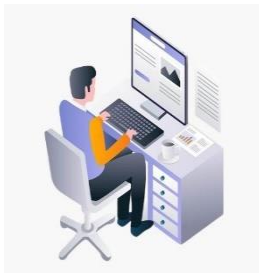
To manually enter data:

- Select an **empty cell**, such as A1, and then type **text or a number**.
- Press Enter or Tab to move to another cell.

To fill data in a series:



- Enter the beginning of the series in two cells: such as Jan and Feb; or 2014 and 2015.
- Select the two cells containing the series, and then drag the fill handle across or down the cells.



Hands on Practice

Create two sheets in MS Excel and generate a series of data e.g. Roll Number of students and in another sheet, use fill handle to fill the text.



Self-Assessment

Use these self-assessment statements to evaluate your own Microsoft Excel proficiency after completing the learning session.

Skill	Yes	No
Do I know what is Excel Workbook and sheet?		
Do I know how to Save and Save as a file?		
Do I know how to Open an existing excel workbook?		
Do I know how to convert an existing workbook into a PDF file?		
Do I know how to enter data into excel?		
Do I know how to create a series-based data into MS Excel?		



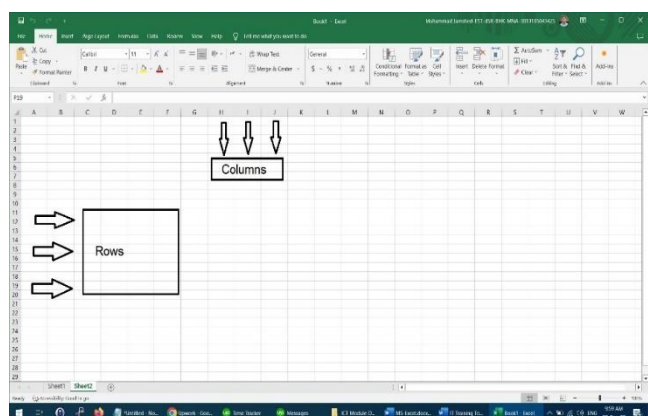


After completion of this session, the participants will be able to

- **Rows and Columns in Excel**
 - Learn about the Rows and Columns in excel
 - Adjust Rows and Columns in the sheet
- **Charts in Excel**
 - Know what are charts and its different types in Microsoft Excel
 - Insert charts
- **Sorting**
 - Know what is sorting in Microsoft Excel
 - Sort the data in the sheet
- **Merge Cells, Wrap text and cell alignments**
 - Apply cell merge cells , and cell alignments
 - Wrap text in a cell

Rows in Excel

A row in MS Excel is a horizontal line of cells that runs from left to right across the spreadsheet grid. Rows are identified by numbers (1, 2, 3...) and are used to organize and display data horizontally.



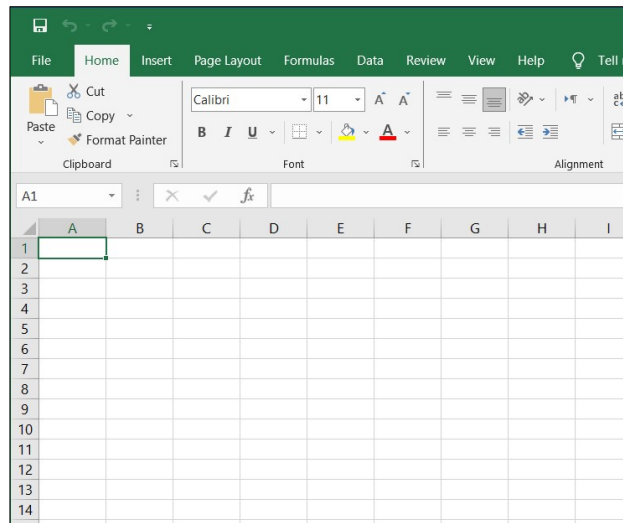
Column in Excel

In MS Excel, a column is a vertical series of cells that runs from top to bottom within the spreadsheet. Columns are labeled with letters (A, B, C...) and are used to organize and display data vertically.

The concept of a “Cell” in Excel Sheet

In MS Excel, a **cell** is the **basic unit of the spreadsheet grid** where you can enter and manipulate data. It is the intersection of a row and a column and is identified by a unique combination of a column letter and a row number (e.g., A1, B2).

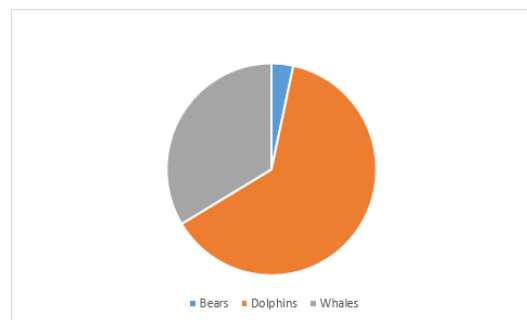
Cells can contain various types of data, including **numbers**, **text**, **formulas**, and **functions**, making them the building blocks for creating worksheets, performing calculations, and organizing information in spreadsheets.



Charts in MS Excel

A **chart** in MS Excel is a **visual representation** of data. It is a powerful tool that can help you to understand and communicate your data more effectively. Charts can be used to compare different data sets, show trends over time, and highlight important relationships in your data.

There are different types of charts in Excel and each have its own features. Some of them are discussed below.



Some most used chart types

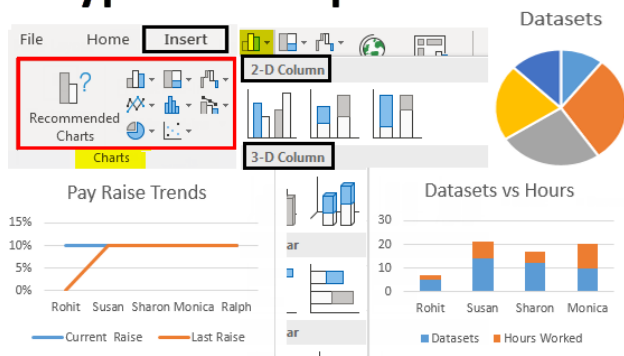
Bar Charts: A bar graph or bar chart is a graph that displays different categories of data with rectangular bars, where the lengths of the bars are proportional to the size of the data category they represent. Bar graphs can be plotted vertically or horizontally.

Column charts: Column charts are good for comparing different data sets. Each data set is represented by a vertical column, and the height of the column represents the value of the data point.

Line charts: Line charts are good for showing trends over time. Each data point is represented by a circle or other marker, and the data points are connected by lines.

Pie charts: Pie charts are good for showing the relationship between different parts of a whole. Each data point is represented by a slice of the pie, and the size of the slice represents the percentage of the whole.

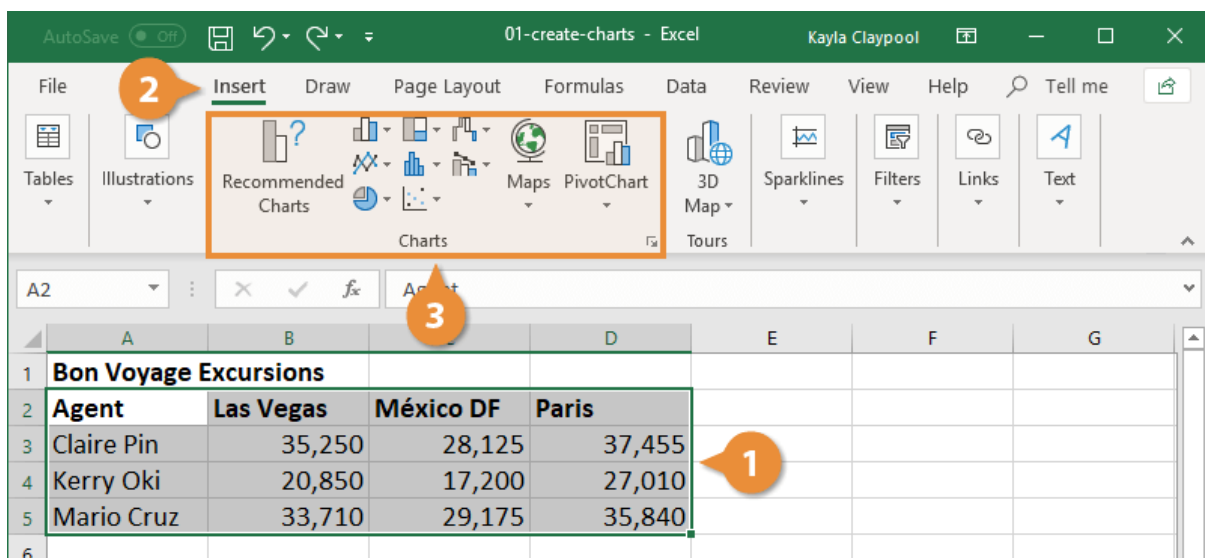
Types of Graphs in Excel



How to Insert Chart in Microsoft Excel

1. Select the data you want to include in your chart. Make sure to include your column names if you want them to be in the chart.
2. Click the **Insert** tab.
3. Select a chart type in the Charts group.

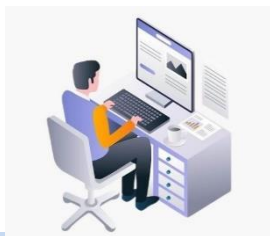
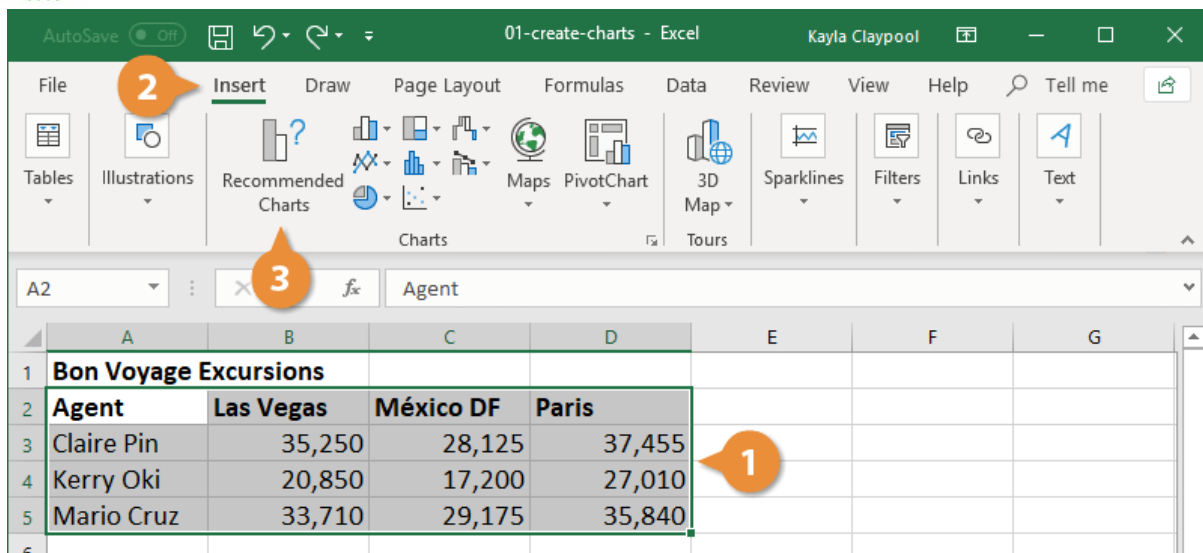
The chart appears in the worksheet and the Chart **Tools** appear on the Ribbon. The Chart Tools include three new tabs—**Design**, **Layout** and **Format**—that help you modify and format the chart. Explore these tabs and make changes to your charts



Create a Recommended Chart

Many times, it's hard to tell what type of chart will best illustrate your data. To help make your decision easier, Excel offers Recommended Charts. This tool looks at the data you have selected and suggests a few charts that will represent it well.

1. Select the data you want to include in your chart.
2. Click the **Insert** tab.
3. Click **Recommended Charts**



Hands on Practice

Create a tabulated data with a minimum two columns and plot a bar chart from that data.

Sorting in Excel

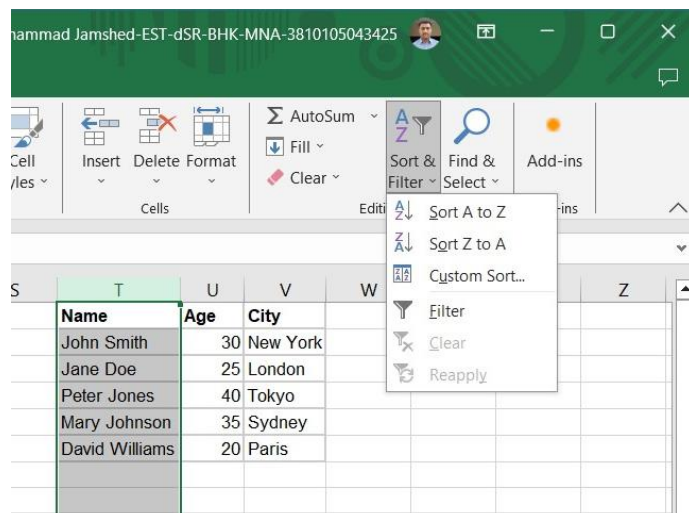
Sorting in **MS Excel** is the process of arranging data in a specific order based on one or more criteria. It's a useful feature for organizing and analyzing data within a spreadsheet. Excel provides both ascending (from smallest to largest) and descending (from largest to smallest) sorting options. Here's how sorting works in Excel:

1. Select a cell in the column to which you want to sort.
2. Click the **Data** tab, then select the **Sort** command.
3. Click on the **Sort Ascending** Icon, if you want to sort data in ascending order.

Or

Click on the **Sort Descending** Icon, if you want to sort data in descending order

4. A message box will pop up for expand selection option, click yes.
5. The worksheet will be sorted according to the selected order.



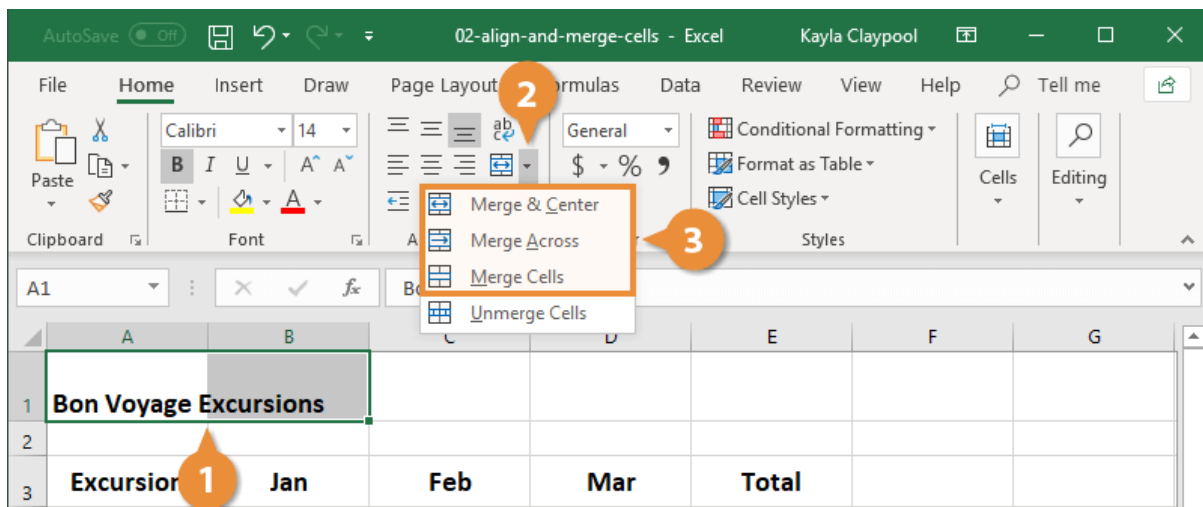
Merge and center

You can merge cells together to create a larger cell without changing the row or column size.

1. Select the cells you want to merge together.



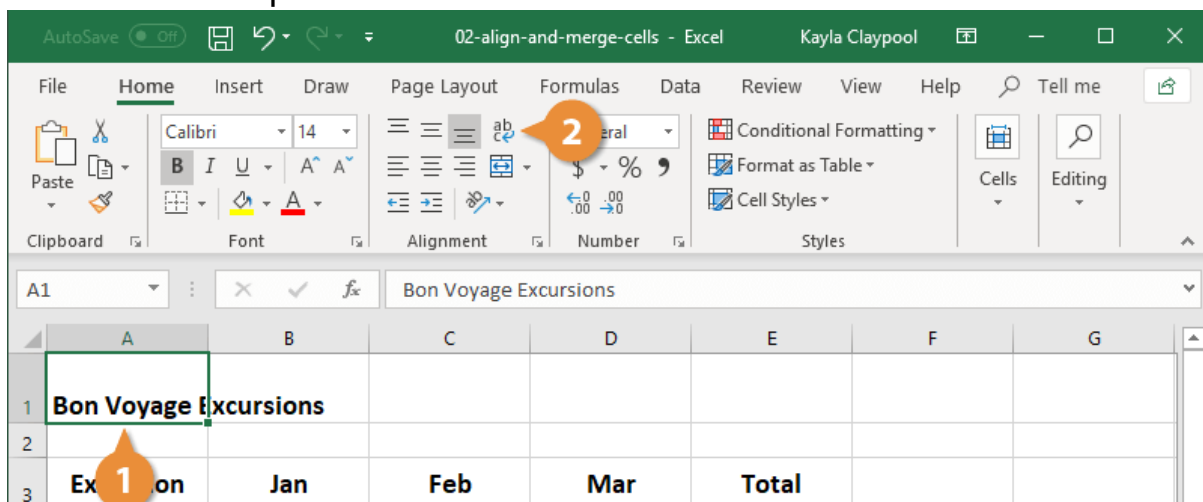
2. Click the **Merge** list arrow.
3. Select a merge option.



Wrap Text in a Cell

You can use the text wrap option to make all cell contents visible. If you wrap text in a cell, it increases the row height to display everything within the cell.

1. Select the cell(s). and click on home tab
2. Click the **Wrap Text** button.



Text Alignment in cells

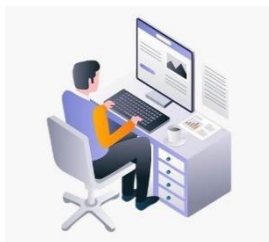
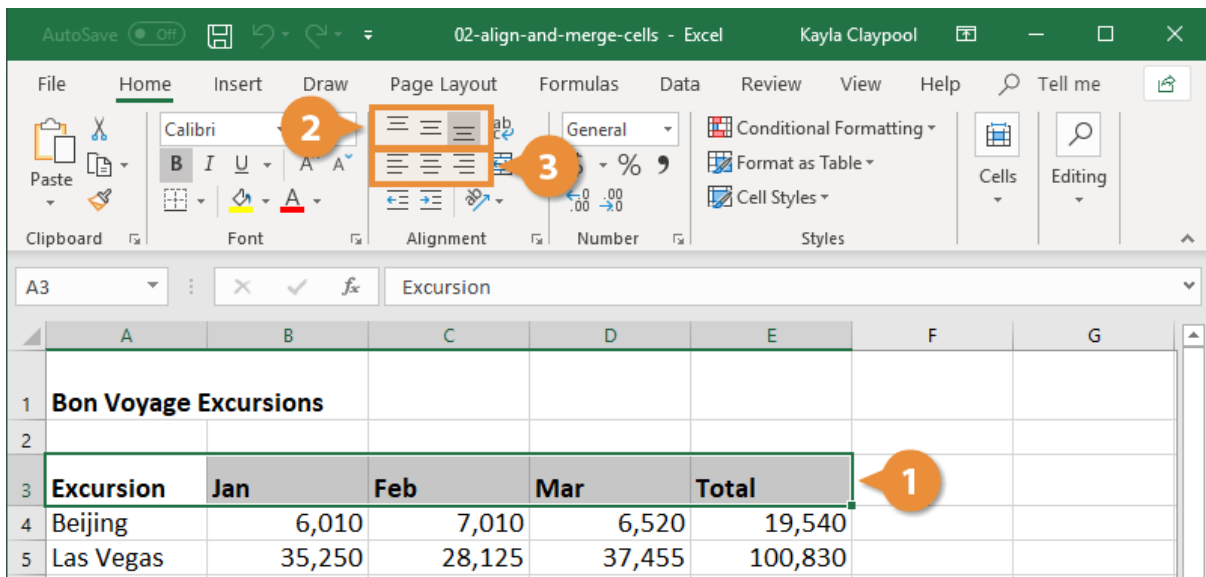
By default, the contents of a cell appear at the bottom of the cell, with numbers aligned to the right and text aligned to the left. If this doesn't work for your spreadsheet, change it with Excel's alignment options.

Change Cell Alignment

1. Select the cell(s) you want to align.
2. To vertically align cells, click the vertical alignment button you want.



3. To horizontally align cells, click the horizontal alignment button you want.



Hands on Practice

Write text in cells and apply the cell alignment, merge cells and wrap text options



Self-Assessment

Use these self-assessment statements to evaluate your own Microsoft Excel proficiency after completing the learning session.

Skill	Yes	No
I can create charts in Ms Excel		
I can choose the most suitable chart type to represent data effectively.		
I understand when and how to merge cells in Excel		
I know how to use the "Wrap Text" feature to make long text entries visible within a cell.		
I can sort data in Excel in both ascending and descending order.		
I am proficient in aligning text and numbers within cells		



SESSION 10 – Use of Formula

90 Minutes



Session Learning Objectives

After completion of this session, the participants will be able to

- **Excel Formula**
 - Know what Excel formula is and what is Function?
 - Learn how to use formulas and function in an excel sheet
 - Manipulate data according to the needs.

- **Use of Most widely used Excel Formulas**
 - Learn different formulas including Sum, Average, Percentage, etc.

- **Conditional output with IF Function**
 - Learn how to use **IF** function to achieve the conditional output based on criteria given in IF function.
 - Learn how to use the **IF** function for school based activities.

- **Paste Special Command**
 - Learn about the various uses of Paste Special command in Excel.



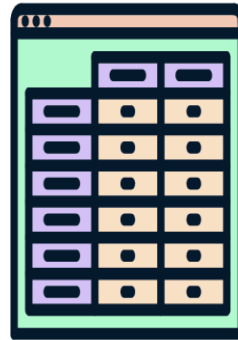
Excel Formula

A **formula** in Excel is an expression that **performs calculations** on values in a range of cells. Formulas can be used to perform simple calculations, such as addition and subtraction, or more complex calculations, such as finding the average or calculating percentages.

Formulas can also be used to perform **logical operations**, such as testing if a value is greater than or less than another value.

Use of common Excel Formulas/Functions

Formulas and function make our life easier and can provide fantastic results in terms of calculations and analysis. We can perform many formulas and functions in a single sheet to achieve the desired results.



=SUM(A1:A5)
=COUNT(A1:A5)
=AVERAGE(A1:A5)
=MIN(A1:A5)
=MAX(A1:A5)
=IF(A1>33,"P","F")

A few common functions and formulas are given below

SUM Function

A highly used function in Excel is SUM. The SUM function in Excel is a mathematical function used to add up a range of numbers. It calculates the sum of all the values within a specified range of cells.

For example:

=SUM(A2:A10) Adds the values in cells from A2 to A10.

=SUM(A2:A10, C2:C10) Adds the values in cells A2:10, as well as cells C2:C10.

SUM with individual Cell References vs. Ranges

Using a function like:

=SUM(A1,A2,A3,B1,B2,B3)

Is equally error prone when inserting or deleting rows within the referenced range for the same reasons.



Student Result Sheet										
#	Name of Student	Subjects				Obtained Marks	Total Marks	Average	Percentage	Result
		Math	Science	English	Urdu					
1	Ali	46	56	69	56	=SUM(C4:F4)	56.75	45.4	Pass	
2	Akram	23	41	31	53	148	500	37	29.6	Fail
3	Aslam	69	49	48	71	237	500	59.25	47.4	Pass
4	Shahid	84	51	79	66	280	500	70	56	Pass
5	Farhan	71	62	71	63	267	500	66.75	53.4	Pass

In the above image, you can see we have used the sum function to calculate the SUM of the cell range C4:F4 in G4 Cell.

Average Function

Average is another important function that calculates the **arithmetic mean** of a set of numbers. It is one of the most commonly used functions in Excel, and it can be used to perform a variety of tasks, such as **calculating the average grade for a class of students, etc.**

Student Result Sheet										
#	Name of Student	Subjects				Obtained Marks	Total Marks	Average	Percentage	Result
		Math	Science	English	Urdu					
1	Ali	46	56	69	56	227	500	=AVERAGE(C4:F4)		
2	Akram	23	41	31	53	148	500	37	29.6	Fail
3	Aslam	69	49	48	71	237	500	59.25	47.4	Pass
4	Shahid	84	51	79	66	280	500	70	56	Pass
5	Farhan	71	62	71	63	267	500	66.75	53.4	Pass



Percentage Formula

It is another important formula to calculate the **percentage** of different items e.g. calculating the percentage of marks obtained by the students in school.

The generic method to calculate percentage is $=\text{number1}/\text{number2} * 100$ like if we want to calculate the percentage of obtained marks by the students, this is the syntax $=\text{obtained_marks}/\text{total_marks} * 100$

Student Result Sheet										
#	Name of Student	Subjects				Obtained Marks	Total Marks	Average	Percentage	Result
		Math	Science	English	Urdu					
1	Ali	46	56	69	56	227	500	56.75	$=G4/H4*100$	
2	Akram	23	41	31	53	148	500	37	29.6	Fail
3	Aslam	69	49	48	71	237	500	59.25	47.4	Pass
4	Shahid	84	51	79	66	280	500	70	56	Pass
5	Farhan	71	62	71	63	267	500	66.75	53.4	Pass

MIN Function

The **MIN** function in MS Excel is a statistical function that returns the **smallest value** in a set of numbers. It is one of the most commonly used functions in Excel, and it can be used to perform a variety of tasks, such as

- Finding the lowest price for a product
- Determining the shortest time to complete a task
- Identifying the smallest number in a range of cells

To find out the minimum value within a given range of cells

- Put the control in the cell where you want to show the **minimum value**
- Write the formula $=\text{MIN}(\text{range_of_cells})$ like in the picture $=\text{MIN}(C4:C8)$
- Press Enter key from keyboard.

Stud				
#	Name of	Subjects		
		Math	Science	English
1	Ali	46	56	69
2	Akram	23	41	31
3	Aslam	69	49	48
4	Shahid	84	51	79
5	Farhan	71	62	71
		$=\text{MIN}(C4:C8)$		

MAX Function



The **MAX** function in MS Excel is a built-in mathematical function used to find the **largest or maximum value** within a range of numbers. It allows you to quickly determine the highest value among a set of numbers.

IF Function

The **IF** function in Excel is a logical function that returns one value if a condition is true and another value if the condition is false. The **IF** function is one of the most commonly used functions in Excel, and it can be used to perform a variety of tasks, such as:

- Making decisions based on data
- Applying different formulas to different data sets
- Creating conditional statements

This is an important function that can be used in educational institutes like designing the report cards, attendance sheets, staff register, etc.. This command has a variety of usage but we are going to use it with only two arguments for the simplicity purpose.

General syntax for this command is **=IF(logical_test, value_if_true, value_if_false)** and in our case, we will be using this as given below

=IF(J4>33, "Pass", "Fail")

Student Result Sheet										
#	Name of	Subjects				Obtained Marks	Total Marks	Average	Percentage	Result
		Math	Science	English	Urdu					
1	Ali	46	56	69	56	227	500	56.75	=IF(J4>33, "Pass", "Fail")	
2	Akram	23	41	31	53	148	500	37	29.0	Fail
3	Aslam	69	49	48	71	237	500	59.25	47.4	Pass
4	Shahid	84	51	79	66	280	500	70	56	Pass
5	Farhan	71	62	71	63	267	500	66.75	53.4	Pass

Paste Special Command

The **Paste Special** option in Excel allows you to **paste copied data** into a worksheet with **different formatting options**. This can be useful for pasting data from other sources, such as websites or other Excel worksheets, without losing the original formatting.

To **use** the Paste Special option, simply copy the data you want to paste and then select the cell where you want to paste it. Next, click on the Paste Special button on the **Home tab**. This will open the Paste Special dialog box.

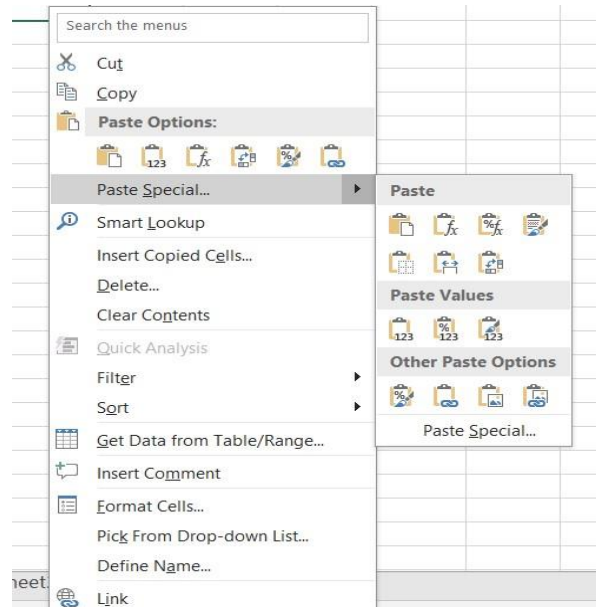
In the Paste Special dialog box, you can select from a variety of paste options. Here are some of the most common options:



- **Values:** This option will paste the values of the copied data without any formatting.
- **Formats:** This option will paste the formatting of the copied data without the values.
- **Linked:** This option will paste a link to the copied data. This means that any changes you make to the copied data will also be made to the pasted data.
- **Picture:** This option will paste the copied data as a picture.
- **Text:** This option will paste the copied data as text.

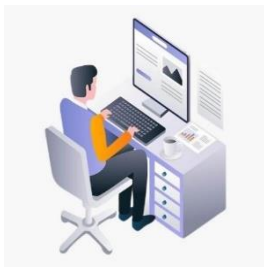
You can also use the Paste Special dialog box to paste formulas, comments, and other types of data.

Here is an **example** of how to use the Paste Special option to paste data from a website into Excel:



1. **Copy** the data from the website.
2. Select the cell in Excel where you want to **paste** the data.
3. Click on the Paste Special button on the **Home** tab.
4. In the **Paste Special** dialog box, select the Values option.
5. Click on the **OK** button.

The data will be pasted into Excel without any formatting.



Hands on Practice

Design a result sheet containing different subjects' marks where you will have to calculate SUM of Obtained Marks, Average, Percentage and Result (Fail/Pass)



Self-Assessment

Use these self-assessment statements to evaluate your own Microsoft Excel proficiency after completing the learning session.

Skills	Yes	No
Can I create a sheet and populate data to it?		
Can I create a result sheet in Excel?		
Can I use get conditional results using If function?		
Do I know the usage of Paste special in sheet?		
Do I know how to sort the data?		
Do know how to filter the data?		



Session Learning Objectives

After completion of this session, the trainees will be able to

- **Use the Gmail**
 - Create a highest used Google Product, Gmail.
 - Read email, reply email and compose a new email.

- **Use Google Drive**
 - Know about the Google Drive and the way how to use it.
 - How to sync the files and photos and store the photos in HD quality.

- **Google Search**
 - Know how to search in using Google search engine.

- **ChatGPT**
 - Provide natural and contextually relevant responses to user queries and engage in meaningful text-based conversations, drawing on a wide range of general knowledge and information.

- **Google Bard**
 - Know conversational AI system that can engage in empathetic and helpful conversations with users, understanding and responding to their emotional and informational needs in a compassionate manner.



Gmail



Gmail (For Desktop Users)

Gmail is a free email service from Google. It is one of the most popular email services in the world, with over 1.5 billion active users. Gmail is easy to use and offers a variety of features, including:

- **Large storage space:** Gmail users get 15GB of free storage space for their emails.
- **Powerful search:** Gmail's search feature is very powerful and can help you find your emails quickly and easily.
- **Spam filtering:** Gmail has a built-in spam filter that helps to keep your inbox clean of unwanted emails.
- **Mobile app:** Gmail has a mobile app that is available for both iOS and Android devices.

Gmail Account Creation

To use a Gmail, you will need to have a Google account. If you do not already have a Google account, you can create one for free.

1. Go to the **Gmail signup page** <https://accounts.google.com/SignUp>
2. On signup page, you have different options but you can select "**For Myself**"
3. Enter your **First Name** and **Last Name** and hit **Next** Button
4. Enter your **Date of Birth** and select **Gender** and hit **Next** Button
5. On this step, Google will **suggest** the email address or you can use your **own**
6. On next step, we add the **password**
7. It will ask for a **Recovery Email Address** (that is optional) but this will be used for password recovery later
8. In the next Step this will ask for **Phone number** (Optional but recommended). Enter the **phone number** and hit **Next** button
9. On the last step, it will ask to **review the information**
10. Click "**Accept Terms and Create Account**".



Beginners ICT Guide for Educators and School Leaders

Google
Sign in
to continue to Gmail

Email or phone
modelwebhost@gmail.com

For myself
 For my child
 To manage my business

node to sign in privately.

Create account Next

Google
Create a Google Account
Enter your name

First name
Jamshed

Last name (optional)
Datori

Next

Step 2

Google
Basic information
Enter your birthday and gender

Month: January Day: 02 Year: 1990

Gender: Male

Next

Step 3

Google
Choose your Gmail address
Pick a Gmail address or create your own

testqaed89@gmail.com
 qaedtest518@gmail.com
 Create your own Gmail address

Use your existing email Next

Step 4

Google
Create a strong password
Create a strong password with a mix of letters, numbers and symbols

Password
.....

Confirm
.....

Show password

Next

Step 5

Google
Add phone number

Phone number
03338901062

Google will use this number only for account security. Your number won't be visible to others. You can choose later whether to use it for other purposes.

Next Skip

Step 6

Google
Review your account info
You can use this info when you need to sign in

QAED Test
testqaed89@gmail.com

Recovery mobile number
0333 8901062

Next

Compose an Email



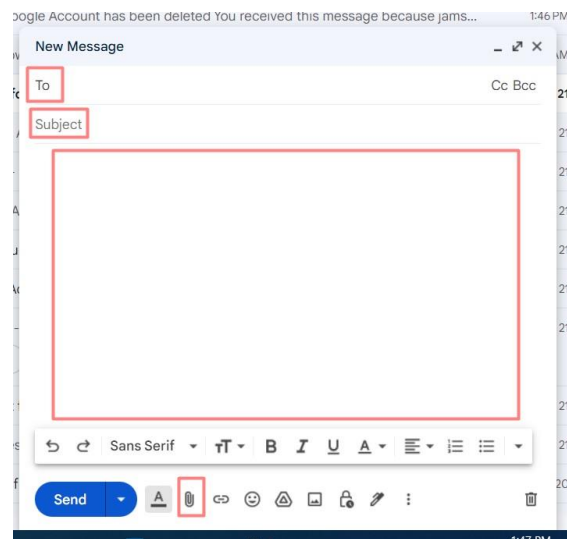
Beginners ICT Guide for Educators and School Leaders

Compose option is used to compose a new email that can be sent to one or many email addresses at a time.

To **log in** to Gmail, go to the Gmail login page and enter your username and password.

To compose an email, click the "Compose" button at the top of the page.

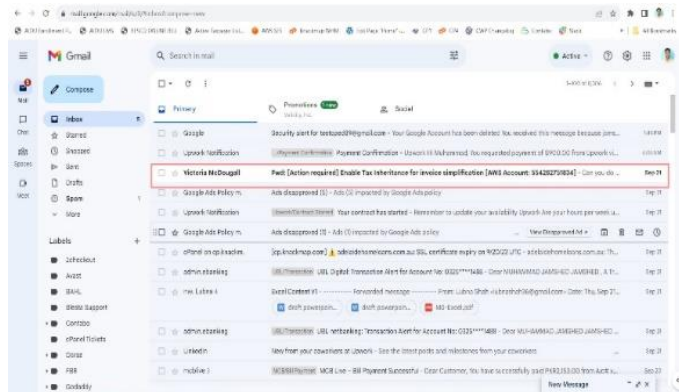
1. In the "**To**" field, enter the email address of the person you want to send the email to.
2. In the "**Subject**" field, enter a short description of what your email is about.
3. In the body of the email, type your **message**.
4. To **attach** a file to your email, click the "**Attach files**" button and select the file you want to attach.
5. When you are finished composing your email, click the "**Send**" button.



How to read emails

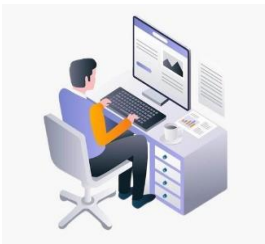
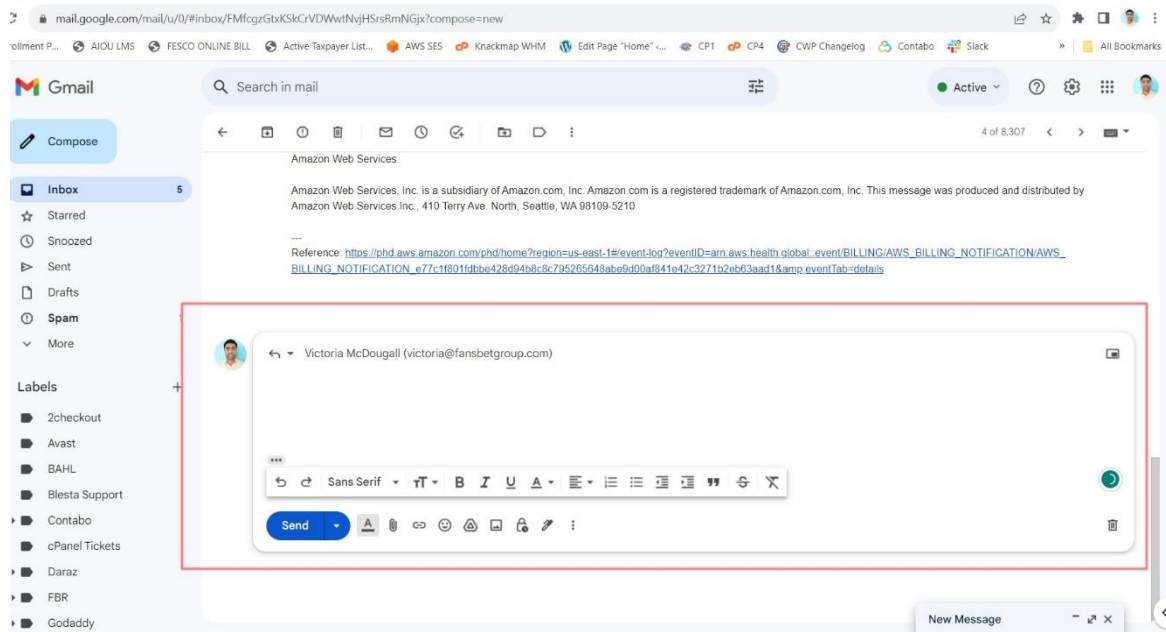
When you **receive** a new email, it will appear in your inbox. To **read** an email, click on it.

- The email will open in a new window.
- You can then read the email and **reply** to it if you want
- Click on **Reply** Button in top right corner
- Write reply message to the email
- Click on **Send** button





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Hands on Practice

Create your new Gmail account, send an email to your co-participant, read an email and reply to it.



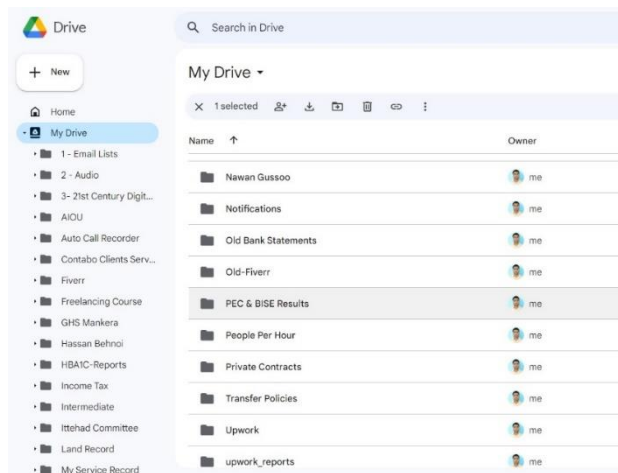
Google Drive



Google Drive Introduction

Google Drive is a cloud storage service developed by Google. It allows users to **store files online** and access them from anywhere with an internet connection.

Google Drive also offers a suite of productivity tools, such as **Google Docs**, **Sheets**, and **Slides**, which allow users to create and edit documents, spreadsheets, and presentations online.

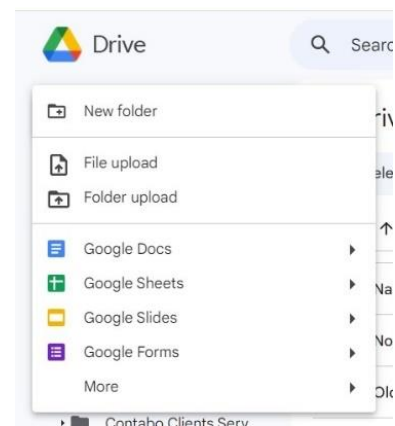


How to use Google Drive

To use **Google Drive**, you will need to create a **Google account**. Once you have a Google account, you can go to **drive.google.com** to access Google Drive.

From the **Google Drive** home page, you can upload files from your computer, create new files using the **Google productivity tools**, or share files with others.

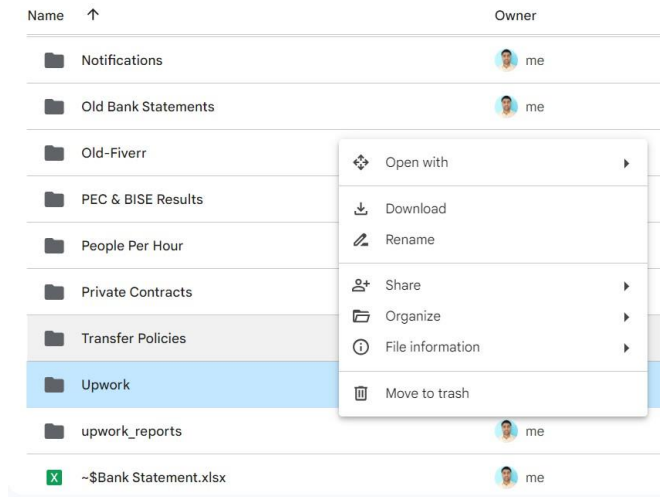
- To **upload files** from your computer, click the **New** button and select File upload. Then, select the files you want to **upload** from your computer.
- To create a **new file** using the Google productivity tools, click the **New** button and select the type of file you want to create. For example, to **create a new document**, select **Google Docs**.






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- To share a file with others, **right-click** on the file and select Share. Then, enter the **email addresses** of the people you want to share the file with. You can also choose to give them permission to view, comment, or edit the file.
- You can also **share the link** of file with someone, anyone with the link can open file, edit, view or comment on it.

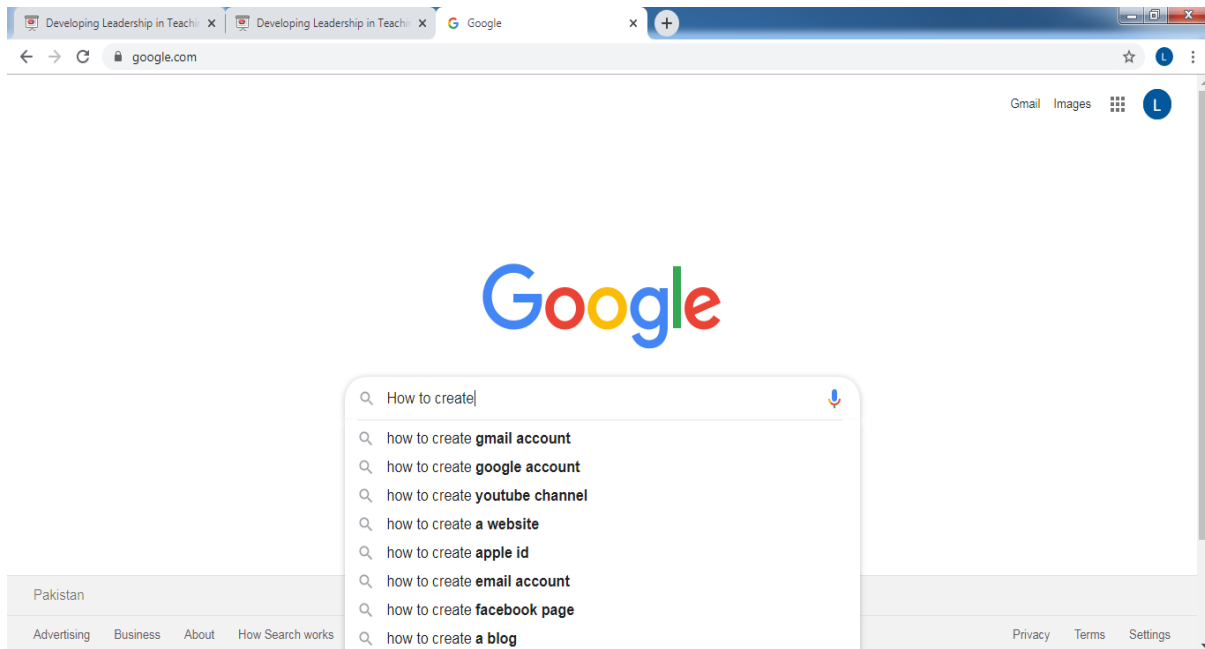


How to Search using Google chrome

You can quickly find what you're looking for on the Internet

1. On your computer, open Chrome .
2. In the address bar at the top, enter the key word of your search.
3. Press **Enter**.

You can search using voice command or image also





Google Photos

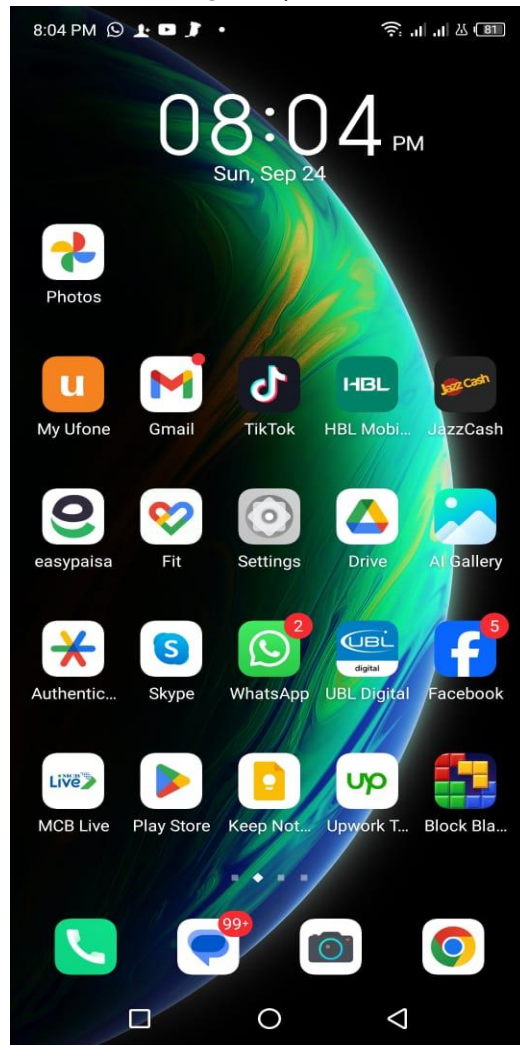


Google Photos is a cloud-based photo and video **storage and sharing service** developed by Google. It is available for free with unlimited storage for photos and videos backed up in High quality (**16MP for photos and 1080p videos**).

You can also choose to store your photos and videos in **Original quality**, but this will count against your Google Account storage limit (15GB for free accounts).

Google Photos is available on the web, as well as on Android and iOS devices. It offers a number of benefits, including:

- **Automatic backup and sync:** Google Photos can automatically back up your photos and videos from your devices to the cloud. Once your photos and videos are backed up, you can access them from anywhere on any device.
- **Powerful search:** Google Photos has a powerful search feature that allows you to easily find specific photos and videos. You can search by date, location, people, objects, and even text in photos.
- **Smart organization:** Google Photos automatically organizes your photos and videos into albums based on date, location, and people. You can also create your own albums and add photos and videos to them manually.
- **Easy sharing:** Google Photos makes it easy to share photos and videos with friends and family. You can create shareable albums, send individual photos and videos via email or text message, or even share them to social media.



How to use Google Photos?

1. To start using Google Photos, **download** the app on your device or visit the website.
2. **Sign in** with your Google account.



Beginners ICT Guide for Educators and School Leaders

3. If you want to **automatically back up** your photos and videos, tap the three lines in the top left corner of the app and select "Settings" > "**Back up & sync**".
4. Toggle the switch on next to "**Back up & sync**".
5. You can also choose to back up only photos or videos, or to back up only when your device is connected to **Wi-Fi**.
6. Once your photos and videos are backed up, you can start viewing, organizing, and sharing them.



Google Bard AI

&

ChatGPT

ChatGPT and **Google Bard** are large language models (LLMs) that are trained on a massive dataset of text and code. They can generate text, translate languages, write different kinds of creative content, and answer your questions in an informative way.



ChatGPT is a **generative pre-trained** transformer model developed by OpenAI. It is a powerful tool that can be used for a variety of tasks, including:

- Generating creative text formats of text content, like poems, code, scripts, musical pieces, email, letters, etc.
- Translating languages
- Answering questions in a comprehensive and informative way, even if they are open ended, challenging, or strange.



Google Bard is a factual language model from Google AI, trained on a massive dataset of text and code. It can generate text, translate languages, write different kinds of creative content, and answer your questions in an informative way, even if they are open ended, challenging, or strange.



Here are some **specific examples** of how ChatGPT and Bard could be used in the classroom:

- A teacher could use ChatGPT to generate personalized learning materials for each student, based on their individual needs and interests.
- A student could use Bard to get help with their homework, or to prepare for a test.
- A class could use ChatGPT or Bard to generate ideas for a creative project, or to research a topic for a report.
- A teacher could use ChatGPT or Bard to create a quiz or test for their students.
- A student could use ChatGPT or Bard to get feedback on their writing, such as an essay or a poem.
- Overall, ChatGPT and Google Bard have the potential to be powerful tools for improving education. They can be used to personalize learning, help students learn new concepts and skills, encourage critical thinking and creativity, provide feedback and assessment, and engage students in active learning.



Self-Assessment

Use these self-assessment statements to evaluate your basic internet proficiency after completing the learning session

Skills	Yes	No
Do I know what AI is?		
Do I know what major AI tools are?		
Do I know what ChatGPT is?		
Do I know what is Google Bard?		
Can I find relevant information using ChatGPT or Google Bard?		
I am proficient in composing and sending emails.		
I am skilled at attaching files to emails.		
I have acquired the knowledge to upload files to my Google Drive.		
I have acquired the knowledge to upload photos to my Google Photos.		
I can confidently conduct effective searches using Google by using keywords		



SESSION- 12 Introduction to Microsoft Teams

90 Minutes



Learning Objectives:

Upon completing this session, participants will be able to proficiently demonstrate the following Microsoft Teams skills

- **Introduction to MS Teams:**
 - Explain the purpose and importance of Microsoft Teams in Online Teaching.
 - Identify the key features and capabilities of Microsoft Teams.
- **Opening and Downloading Microsoft Teams:**
 - Launch Microsoft Teams from various methods, including desktop shortcuts and the Start menu.
 - Downloading Teams Mobile App from Play Store.
 - **Sign in** Microsoft Teams using QAED credentials.
- **Interface of MS Teams:**
 - Identify and describe the main components of the Microsoft Teams interface, including the Activity, Chats, Teams, Calls and Calendar.
 - Record the Teams meeting.
- **Join or Schedule Meeting:**
 - Schedule or Join a meeting using Calendar.
 - Create and Share meeting link to Add participants
 - Use different meeting control options



Introduction to Microsoft Teams

Microsoft Teams is a communication platform developed by Microsoft. Teams primarily compete with the similar service slack, offering workspace chat, videoconferencing, file sharing and application integration.

Teams can help you to

- Schedule and Record audio and video meetings.
- Easily share your screen with team members for detailed explanations.
- Sharing files quickly.
- Chat with meeting participants.
- Integrate and use multiple apps within Teams platform.

How to use MS teams?

Method-1: We can use Microsoft teams from **webpage** by using

- <https://www.microsoft.com/en-us/microsoft-teams/log-in> OR
- <https://www.office.com/?auth=2>

After clicking on any of the above link, **Sign in** into your **Microsoft account** by using your **credentials** (User name and passwords) provided to you by **QAED**.

Method-2: We can use MS teams from Microsoft Teams Desktop App or Android App.

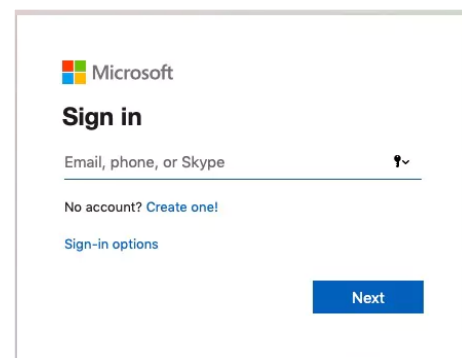
We can install desktop app from MS Teams official webpage by using this link

<https://www.microsoft.com/en-us/microsoft-teams/download-app>.

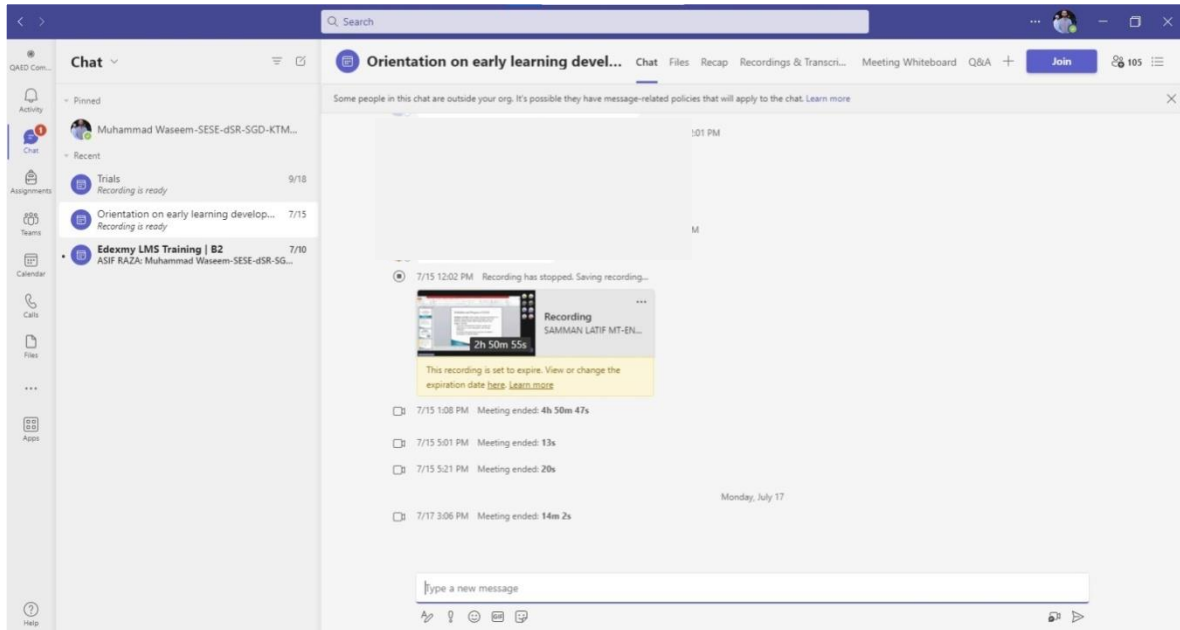
We can install android app from **Play store** by using this link

<https://play.google.com/store/apps/details?id=com.microsoft.teams>

After installation of app simply sign in with your Credentials provided by QAED.



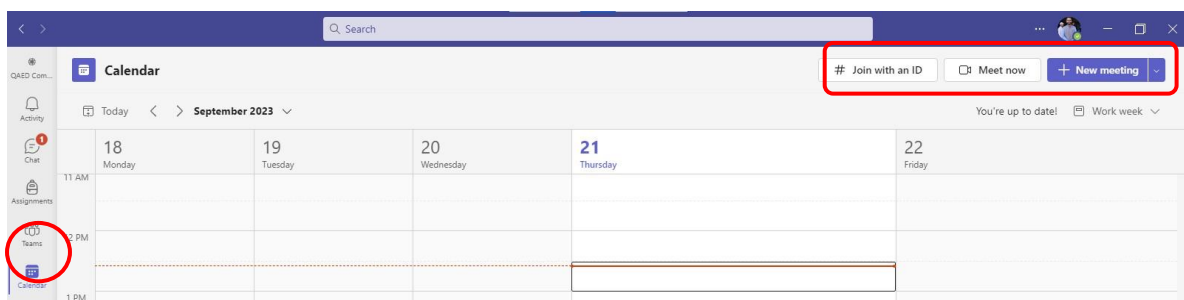
Interface of MS Teams



There are different options available in MS Teams app like **Activity, Chat, Assignments, Teams, Calendar, etc.**

How to create MS teams meetings?

- Select **Calendar**, A new window will appear.
- On top right corner there are two options to host a meeting.
 - Meet Now
 - New meeting
- **Meet Now** option is used to host instant meetings.
- **New meeting** is used to schedule a meeting for later.



When you click on the **New Meeting** Option, a new window will appear.

Extra Bit...!

#Join with an ID is used to join others meetings with an ID shared by hosts.



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Complete the **New meeting** details and click on **Save** button.

A meeting link will be created, and you can copy and share that link with other expecting meeting participants.

QAED Com... **New meeting** Details Scheduling Assistant **Must Check your Time zone before scheduling a meeting** Save Close

Show as: Busy Category: None Time zone: (UTC+05:00) Islamabad, Karachi Response options Require registration: None Options

Add title **Add Title of the meeting here**

Add required attendees + Optional

9/25/2023 11:00 PM → 9/25/2023 11:30 PM 30m All day

Does not repeat **Meeting Start Date & Time Meeting end Date & Time**

Add channel

Add location Online meeting

Type details for this new meeting

Activate Windows Go to Settings to activate Windows.

https://teams.microsoft.com/_/#/calendarv2

Calendar # Join with an ID Meet now + New meeting

Today < > September 2023 Work week

25 Monday 26 Tuesday 27 Wednesday 28 Thursday 29 Friday

9 AM

10 AM **Review meeting** Microsoft Teams Meeting **After Save meeting will be shown on calendar**

11 AM **On Clicking this, a menu appear with joining link**

12 PM

1 PM

My calendar

Review meeting
Sep 26 10:30 AM – 11:00 AM

Join Edit **You can Copy Meeting Link**

Microsoft Teams Meeting

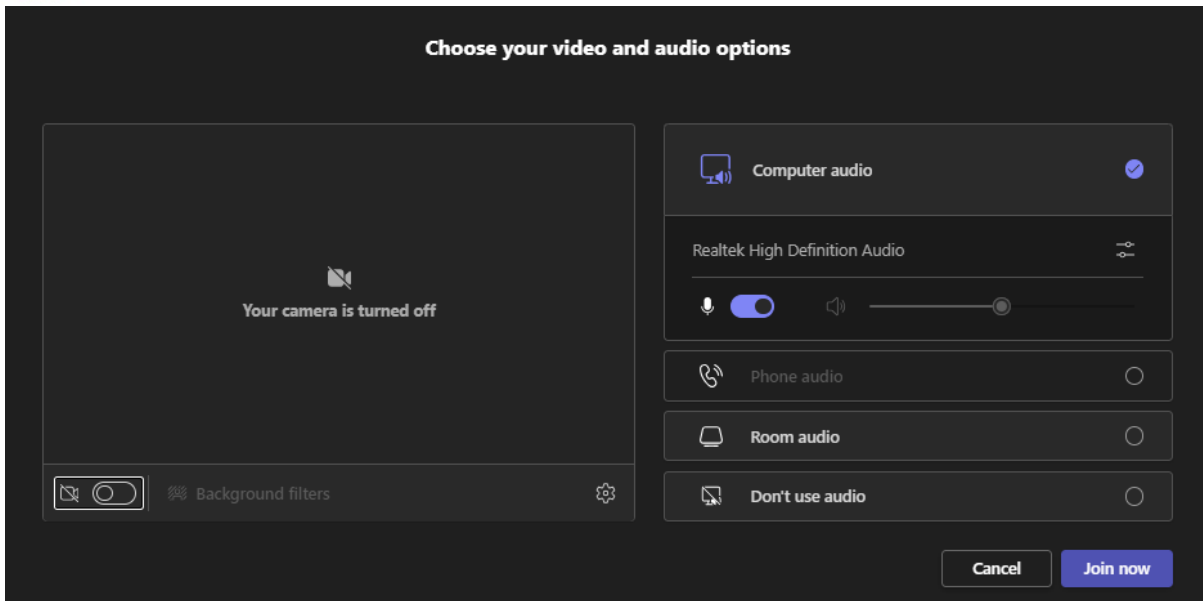
https://teams.microsoft.com/j/meetup-join/T...

Chat with participants

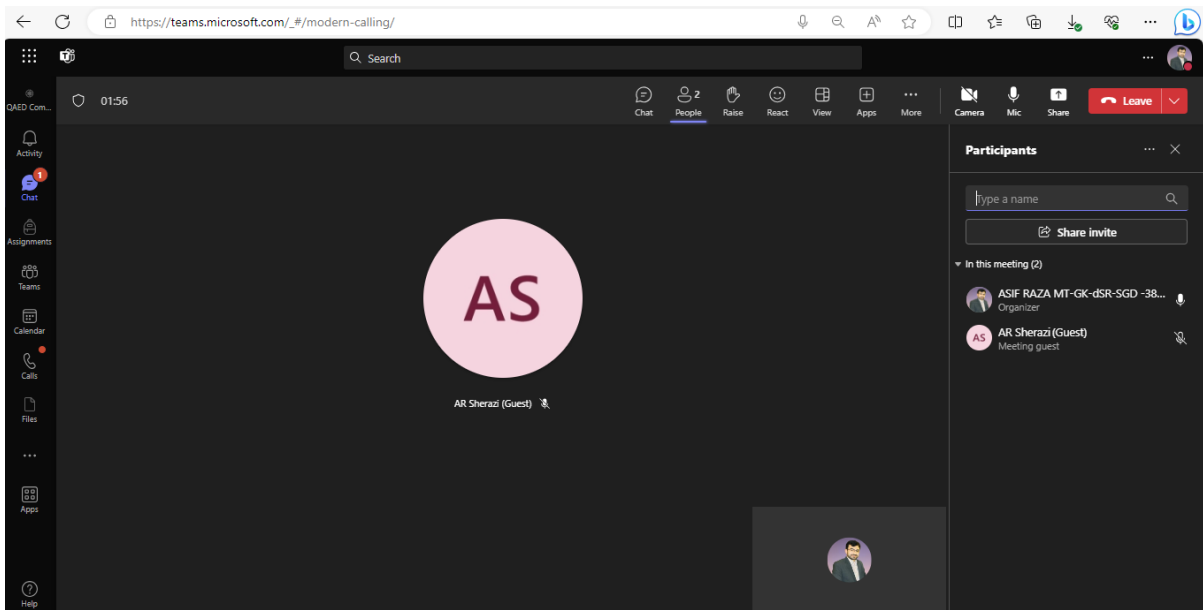
ASIF RAZA MT-GK-dSR-SGD Organizer

Activate Windows Go to Settings to activate Windows.

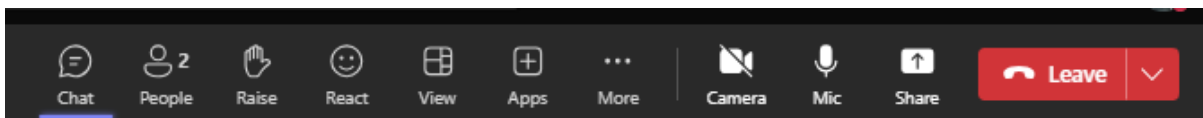
Before joining the meeting must check your Mic and Camera.



On clicking **Join Now** button your meeting will start. Other participants will join your meeting through meeting link you already shared with them.



In meeting screen you will see different options to control and manage **Teams** online meeting.



Chat option is used to chat with meeting participants during live meeting.

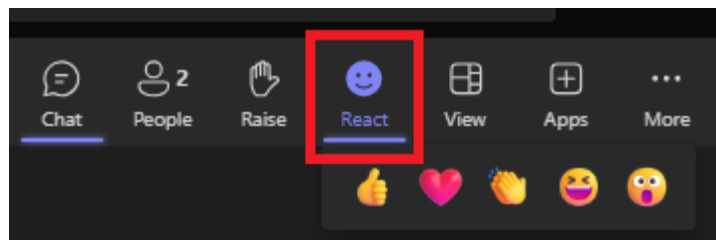
People option is used to view all meeting participants and also used to change their roles and to manage mic control.

Raise option is used to raise your hand during the meeting. If any participant wants to say something during the meeting then he/she will click on this option then **Admin** will allow him/her to say using mic.



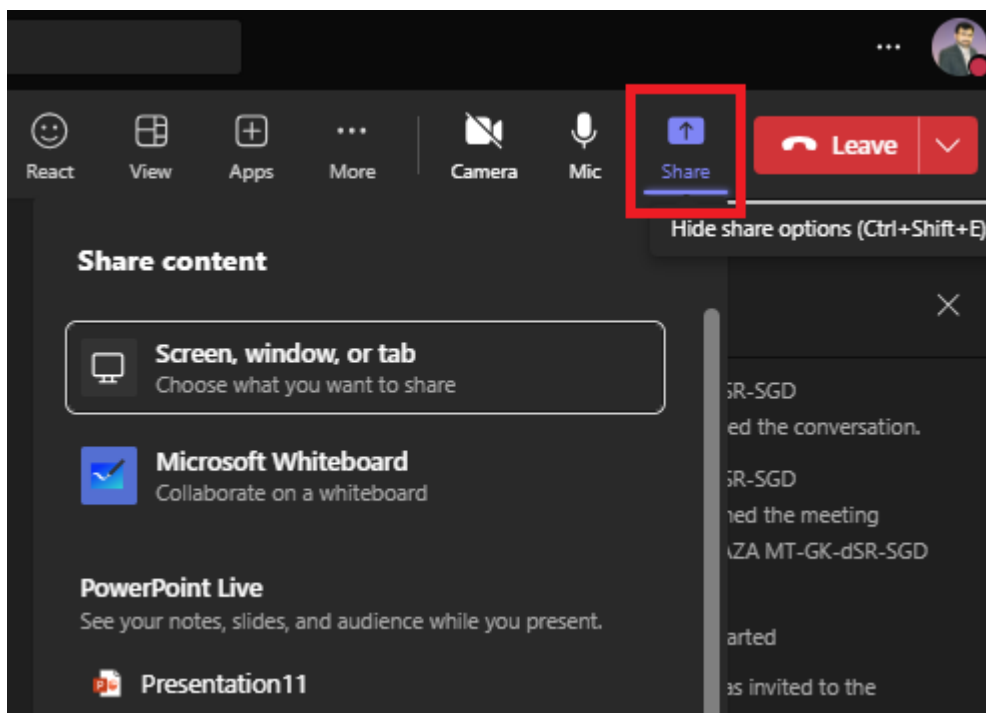
Beginners ICT Guide for Educators and School Leaders

React option is used to show your reaction using Emoji during the meeting.



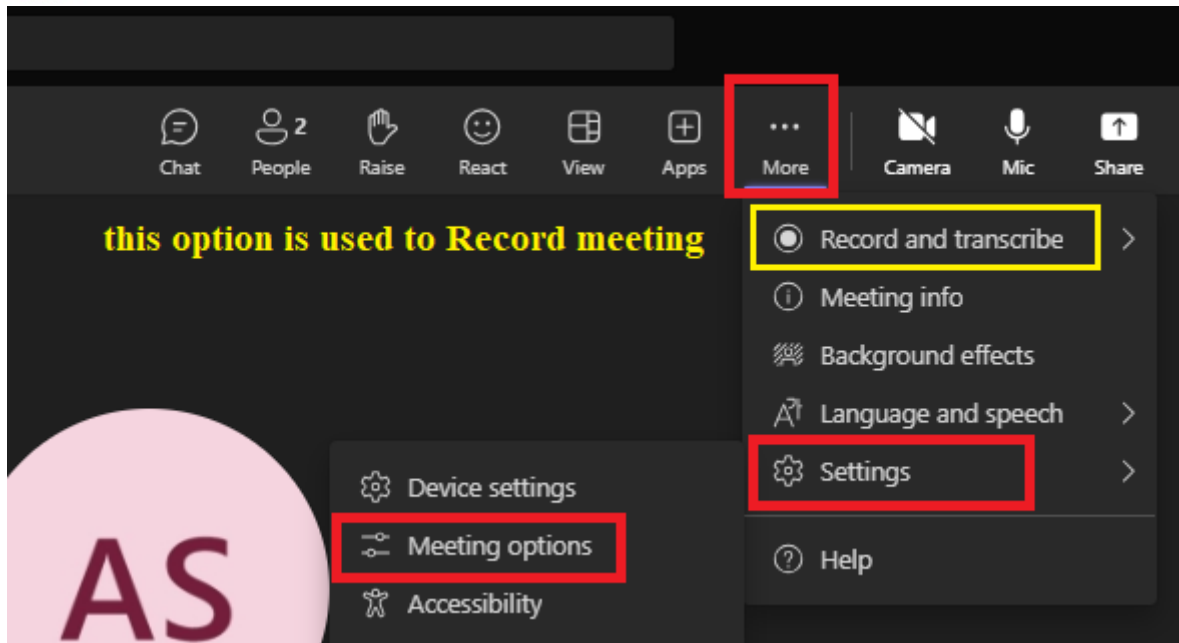
View option is used to select screen view among different screen views.

Share option is used to share your screen with participants during live meeting.



More option includes further different meeting control options.

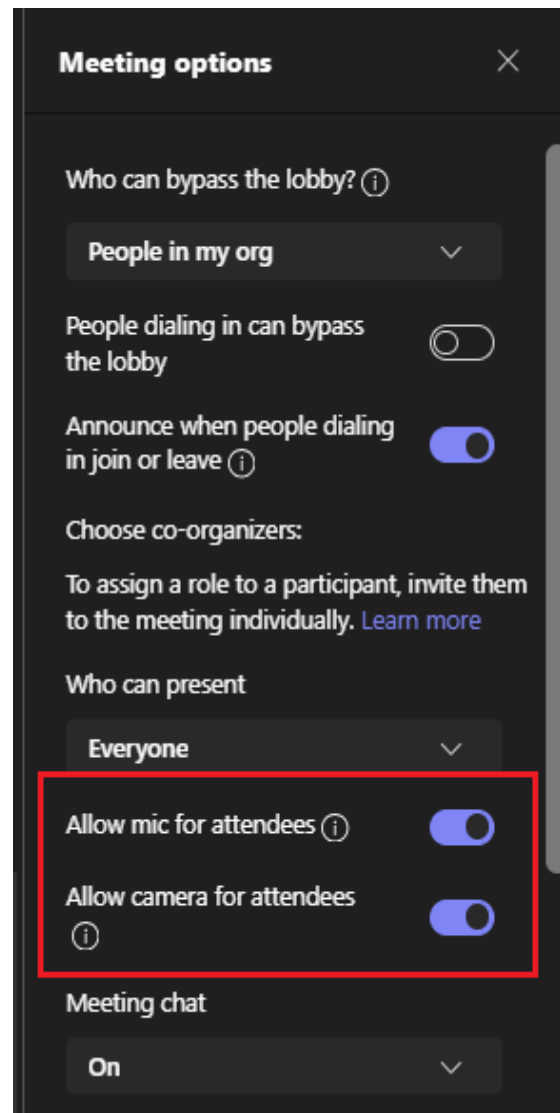
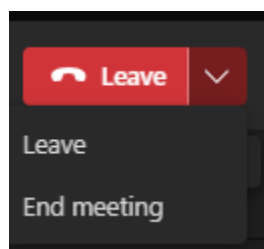
- **Record and transcribed** option is used to record Teams meeting.
- **Meeting Info** option is used to view the meeting link, ID and Passcode.
- **Background effects** option is used to change your background while using your camera.
- **Setting>>Meeting options** – this option is used to manage different meeting controls like participants Mic, Cam on/off option.



These meeting options are visible only on Admin side. Participants cannot change meeting settings during the meeting.

- Here being an Admin you can mute/un-mute the mic of all the participants.
- You can enable/disable the participants Camera from Admin side.
- You can lock the meeting so that after a start of meeting no one can join the meeting.
- You can also enable/disable the **meeting chat** and **Reactions**.

Leave button is used to Leave or End meeting. Participants have only Leave option.



SESSION-13 Microsoft Teams Mobile App

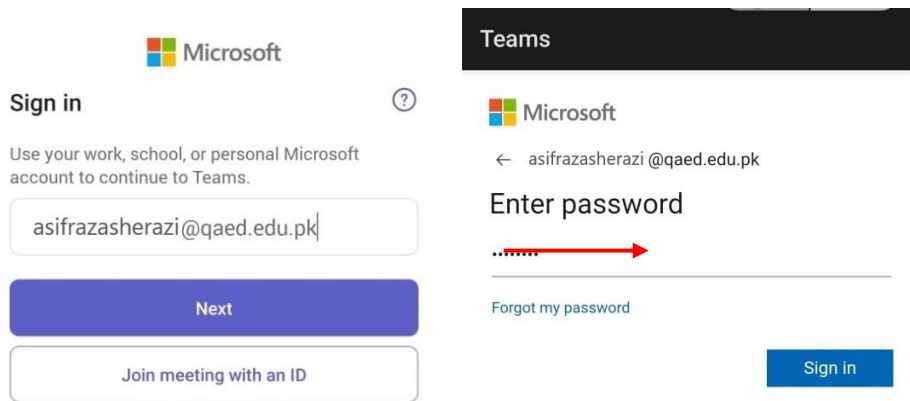
90 Minutes

Microsoft Teams Mobile App allows you catch up on important Teams activity, even when you can't be at your computer. You can chat with colleagues/students, attend meetings, and even make and receive calls from your cell phone, all while you're on the go! Teams primarily compete with the similar service Slack, offering workspace chat and videoconferencing, file storage and application integration. The free version of Teams is available for anyone to use.

How to use MS Teams App?

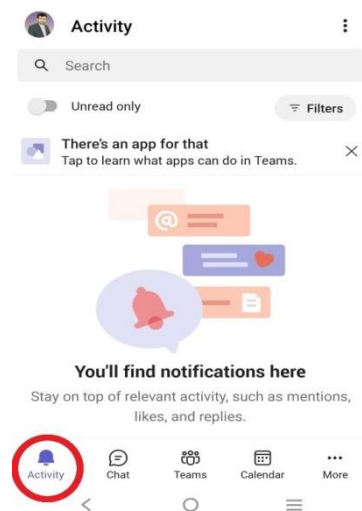
Teams Mobile App is available for IOS and Android. To download the Teams mobile app, go to your mobile device and download it from the iOS App Store or Google Play Store.

After downloading the Teams App **Sign In** using your QAED official account.



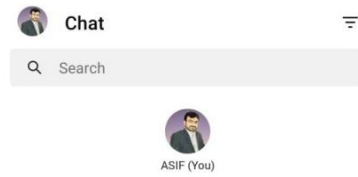
Interface of MS Teams App

Activity Keep up with important Teams notifications by selecting *activity* or the bell icon. This will show you all the notifications relating to chats, calls, channel activity and more. With the Teams mobile app, you'll never have to worry about missing notification when you're away from your desk!



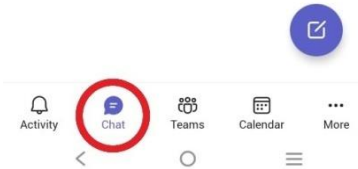
Chat

Send chat messages to your coworkers or students, even when you're on the go! Click into any of your pre-existing chats to send a message or start a new chat using the *new chat button*.



Teams

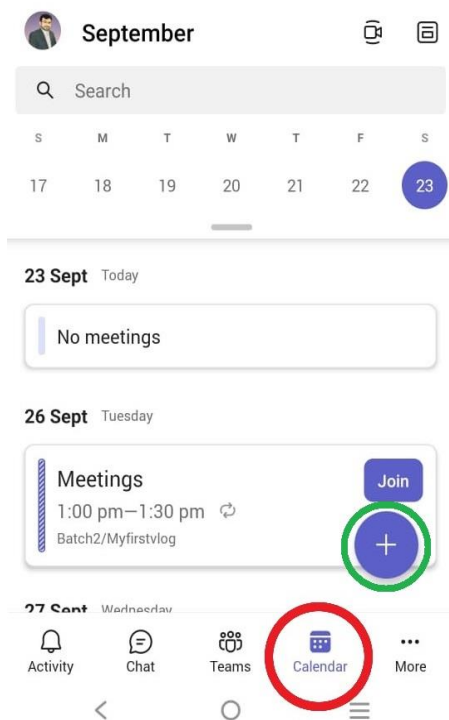
Clicking the *Teams* button will give you access to all your teams and channels.



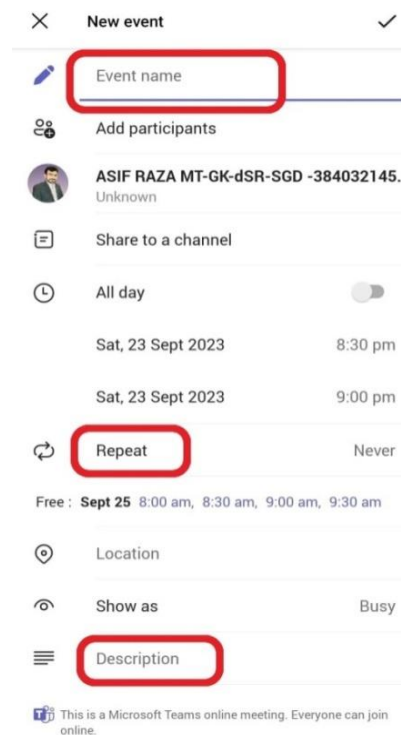
Calendar

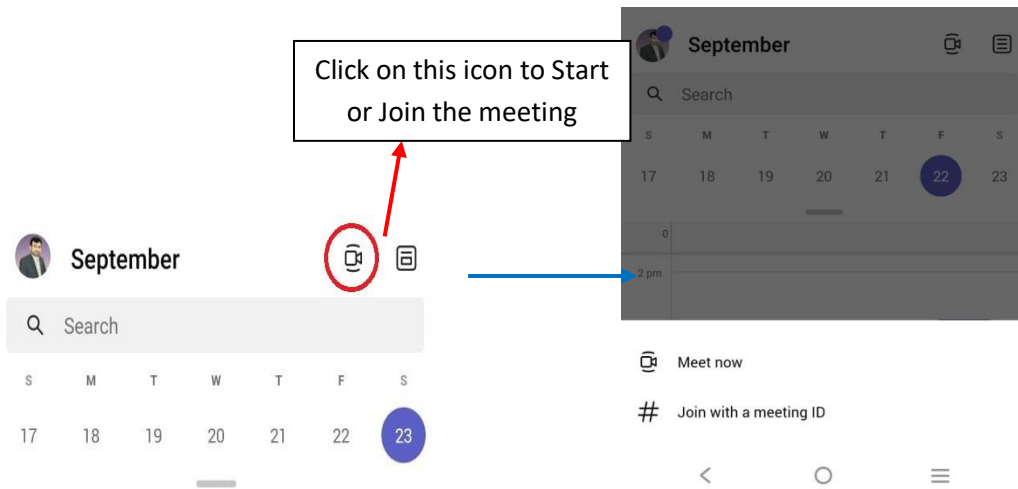
Simply click the *Calendar* icon to see all your meetings. You can click on a meeting to join even when you're away from your computer. Teams is also smart enough to remind you to join meetings that are already in progress when using the app.

How

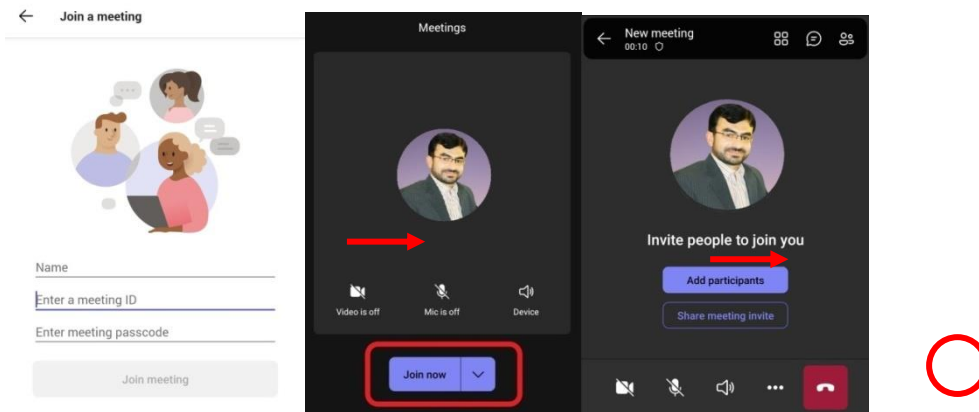



to join a Teams meeting?





- To create an instant meeting you simply click the **Meet Now** button.
- Add meeting participants using **Add participants** option or invite the participants using **Share meeting invite** option.

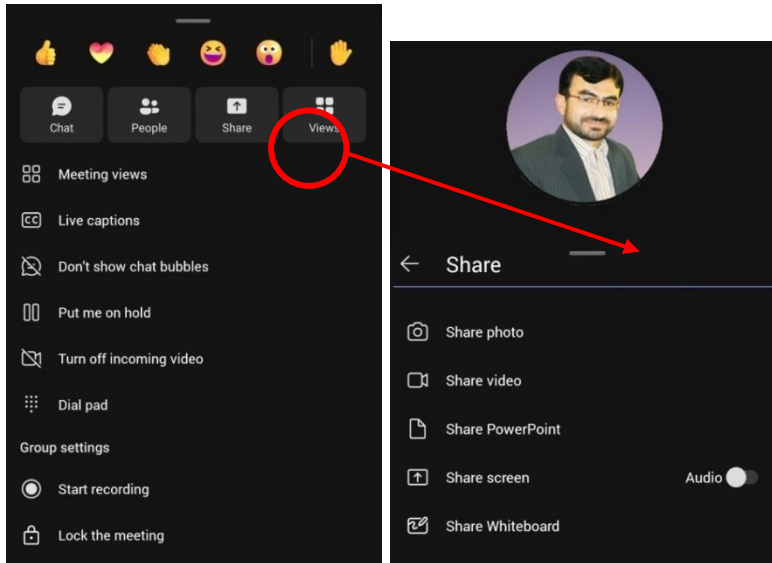



To view different meeting control options click on the  icon. You will see here different options like chat, people, share, views and others.

- **Chat** option is used to make conversations, share links and files with the meeting participants during the live meeting.
- **People** option is used to view the list of the meeting participants.
- **Share** option is used to share your Screen, photos, videos, PowerPoint and whiteboard.
- **View** option is used to see different meeting views.
- **Start recording** option is used to record the meeting.

Extra Bit...!

We can join the meeting as a guest without signing in.



➤ After attending the meeting you can Leave or End the meeting using  icon.



Hands on Practice

Through **Teams Mobile App** start a meeting using **Meet Now** option and add minimum 3 participants in your meeting.

Use the following options during the meeting.

- Chat with the participants
- Mute and Un-mute participants Mics.
- Share your Screen





Upon completing this session, participants will be able to

- Understand various social media platforms and their unique features.
- Learn how to navigate, use, and optimize your presence on these platforms.
- Explore best practices for personal and professional use of social media.
- Understand the potential risks and challenges associated with social media, including privacy and security concerns.

Introduction to Social Media Applications

In the ever-evolving landscape of communication and connectivity, social media applications have become integral part of our personal and professional lives. These platforms have revolutionized the way we interact, share information, and build communities in the digital age.

Why educators and school leaders should learn about social media?

Teachers and school leaders should have knowledge of social media for several reasons. First and foremost, social media has become a prominent communication and information-sharing platform for students and their parents. Understanding how to use social media effectively allows educators to engage with students and their families, fostering better communication and collaboration. Additionally, it enables them to monitor and address issues related to cyberbullying and online safety, ensuring a secure learning environment. Furthermore, social media can be a valuable educational tool, offering opportunities for teachers to enhance classroom learning, share resources, and connect with a broader educational community. So, a practical knowledge of social media is an essential skill for educators and school leaders to navigate the digital age effectively.

What Are Social Media Applications?

Social media applications, often referred to as "social networks" or "social platforms," are digital tools designed to facilitate online interaction, content sharing, and networking. They empower users to connect with friends, family, colleagues, and even strangers across the globe. Popular social media platforms include Facebook, Twitter X, Instagram, LinkedIn, and TikTok, among many others.



facebook®

Facebook

Facebook is widely considered as the most popular social network. Facebook is the third most visited website in the world after Google and YouTube. Facebook lets users share all kinds of content such as photos and videos. You can also share live broadcasts and albums.

Uses of Facebook in Education

When you begin to see Facebook as a potential educational tool, you will discover several ways to integrate this platform into your classroom.

- Facilitate classmate connections.



- Use Facebook Live to provide additional help to students
- Teach students digital citizenship skills.
- Share educational content.
- Make Global Connections
- Provide direct communication with teachers
- Facebook Page can be used for school promotions and admission campaigns.

How to use Facebook?

You will open www.facebook.com in your browser or download Facebook mobile app from Play Store. After that create your Facebook account using **SignUp** option. You can use your Gmail account or mobile no. for Facebook account creation.

After creating your Facebook account **Sign In** with your account ID and password.

Personalise Your Profile

A profile is a place on Facebook where you can share information about yourself, such as your interests, photos, videos, current city, and hometown. To see your profile, click or tap your name or profile picture at the top of Facebook.

If you want to update your profile for any reason later on, simply go to the '**About**' section of your profile. Once there, you can fill in more details about yourself. You can add your education, job title and more.

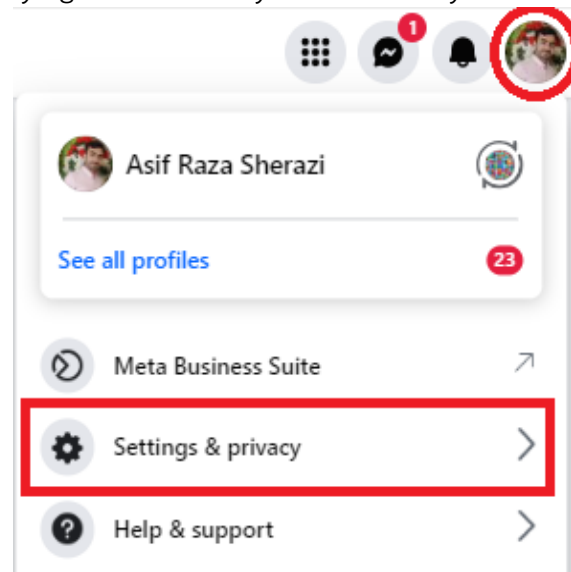
Having a well detailed profile will make it easier for your Facebook friends and audience to find you.

Set Up Your Privacy

One of the most important basics of Facebook is staying secure. Once you've created your new profile, you can make changes to your privacy settings. This will control who can view your profile and information you share.

- To edit these settings, click on the **'Settings'** options.
- Then, click on the **'Privacy'** option and make your changes as you see fit.

You can also control how other people can find you and make contact with you on Facebook.

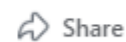


Facebook Features

Facebook has a wide range of features. Few basic features are described below.

Facebook Timeline

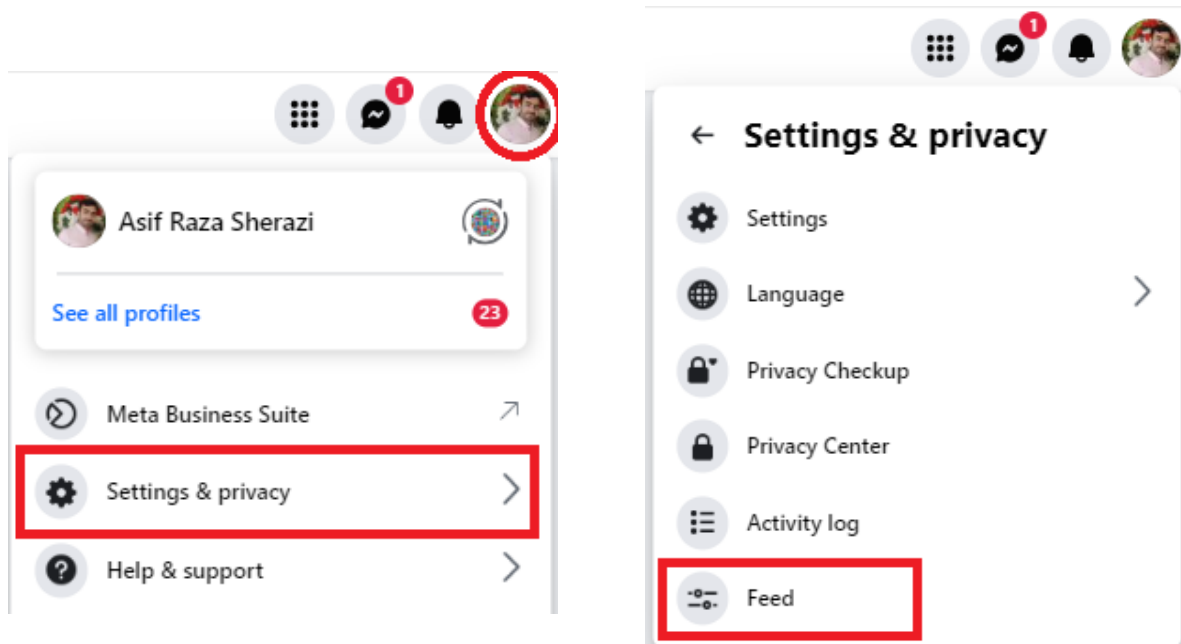
Your timeline on Facebook is a 'log' of your activity in backwards-chronological order. You will be able to see your uploaded media and status updates on your timeline. Also, the photos that you were tagged in by your friends will also show up here. You can see updates from Facebook friends on your timeline and interact with them. Facebook lets you react to posts and comment on them. You can also share the posts that you like most. If you feel like it, you can share posts and other content on your friend's timelines too.



Newsfeed

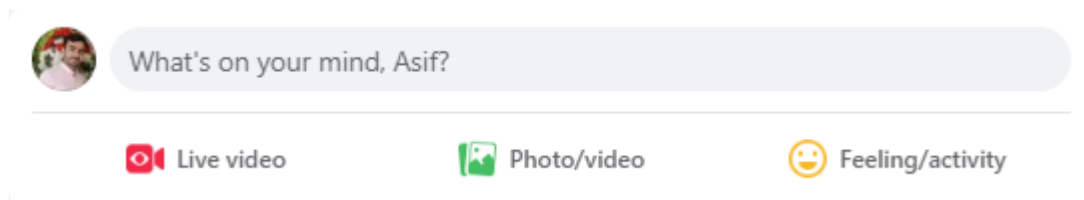
Your newsfeed is unique to your own page. You will see posts from your friends and liked pages. Also, you will see ads from brands that you might be supporting or using.

You can change how your feed looks by managing your preferences. Select the 'Settings' menu and go to the 'News Feed Preference' option. You can choose whose content you see first and more.



Facebook Status

You can update your status by typing in the box that asks **'What's on your mind?'** and many Facebook users see it as a quick way to let everyone know what's up in their lives.



Status updates are short and quick. Many Facebook users like to share inspiring quotes this way.

Facebook Stories

Facebook Stories are a visual way to share content. You can share pictures and videos in a Facebook story. You can also watch the stories shared by your friends. A story is visible to users for one day (24 hours).

Going Live

This feature allows Facebook users to share live broadcasts with their friends. You simply have to select the **'Live Video'** option from the **'What's on your mind?'** button.

Once select this option, you can write your description for your broadcast, add a feeling or activity and tag people. You can also add a poll. Once you've finished describing your broadcast, simply press **'Go Live'** and you're recording.

Facebook Messenger

This is Facebook's chat feature and is all about sending messages to other users. For Mobile users Facebook messenger app is also available on play store. You can use messenger app, if you need to stay in contact with your friends while not using Facebook itself.

You can also create group chats to involve a handful of people by selecting the **'New Group'** option.

Facebook Page

A Facebook pages are places on Facebook where artists, public figures, businesses, brands, organizations and nonprofits organizations can connect with their fans or customers. When someone likes or follows a Page on Facebook, they can start seeing updates from that Page in their Feed. Pages have the basic same functions as Facebook profiles with the added ability to advertise and track performance.





WhatsApp

WhatsApp

WhatsApp is part of **Meta** group. One of the most common social media app which is in use globally. It's simple, reliable and free.

Common Uses

- Private messaging
- Voice calls
- Video calls
- Group chats
- Group calls
- and much more....

How to download WhatsApp?

You can download it from **Google Play store / Apple Store / Microsoft store** (desktop windows app).

Interface of WhatsApp

(Version updated on 13th sep 2023)

WhatsApp has simple interface which can be easily use by anyone.

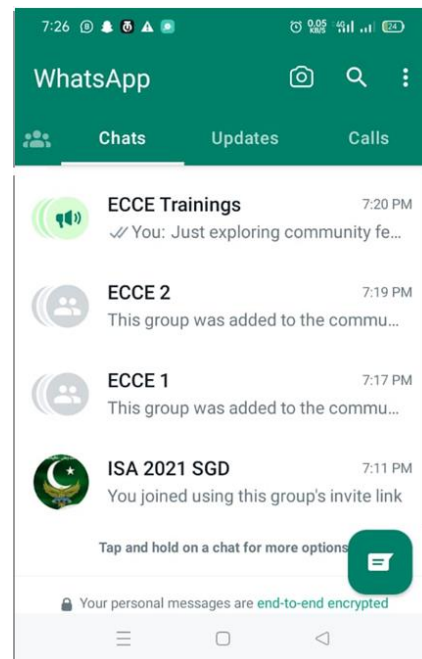
Here how it looks:

Communities: This is first tab from left which enables you to create communities.



Chats: Chats tab shows your personal chats, group chats and communities announcements.

Updates: Updates tab includes **status** and **Channel** options.


Calls: Calls tab enables you to make **voice** or **video** calls.



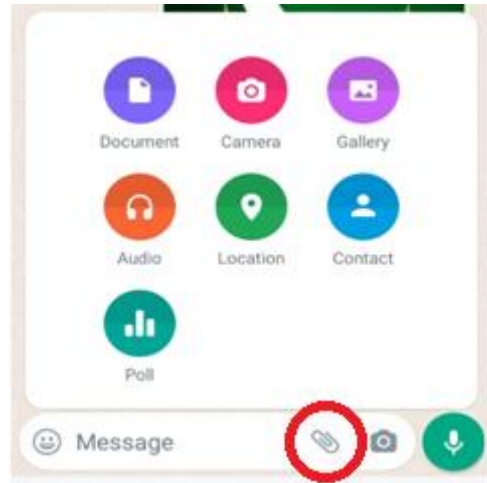
How to Start Chat?

- Click 
- Select a contact to chat with.
- Enter a message in the **Message** box to start chatting with the selected contact.
- Press  to **Send**.

Things we can share in a chat:



By clicking  the following options will appear:

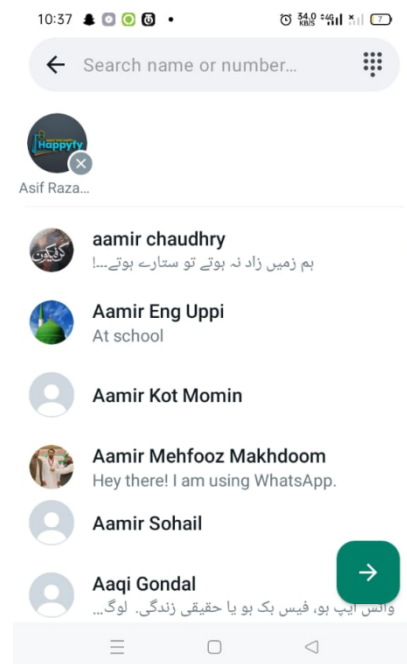
- Document
- Camera (directly capture using camera)
- Gallery (pictures and videos from gallery)
- Audio (any audio file from mobile storage)
- Location (Your current/Live location)
- Contact (any contact from your contact list)
- Polls (can create polls to take opinions, ask questions etc.)

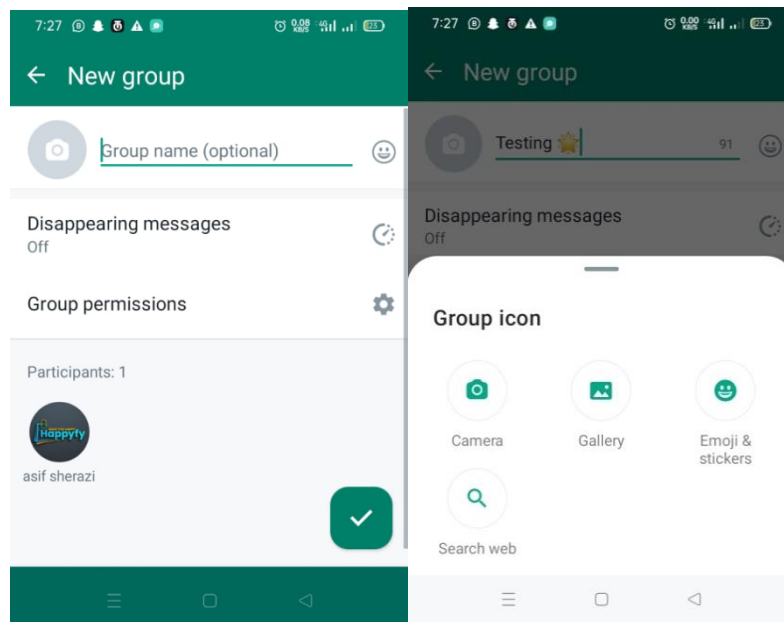


How to create a WhatsApp group?

You can create a WhatsApp group with up to 1024 participants.

- Open WhatsApp> tap  **New group**.
- Alternatively, tap  **New group**.
- Search for or select contacts to add to the group. Then, tap the green arrow icon.
- If your contact doesn't have a WhatsApp account, you can choose to send them an invite link via SMS.
- Enter a group subject. This will be the name of the group that all participants will see.
- You can add a group profile picture by tapping the **Camera** icon. You can choose to use your **Camera, Gallery, Emoji& Stickers**, or **Search Web** to add an image. Once set, the icon will appear next to the group in the **Chats** tab.
- Tap the green check mark icon when you're finished.





Above images show the process of creation of New **WhatsApp** group in a sequence (from Left to Right).

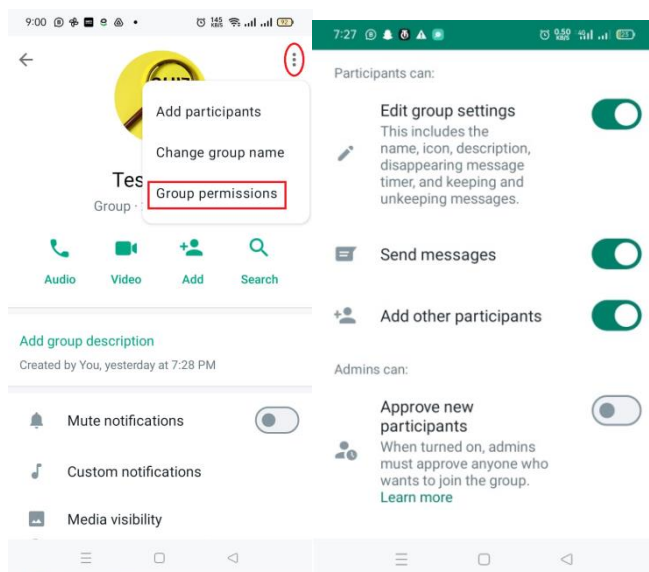
Admin controls of WhatsApp group

By default, all group participants can send messages and change group information including the group subject, icon, or description.

Group admins can change settings to allow either only admins or all participants to edit group info, send messages or add people to a group.

Steps to change group settings:

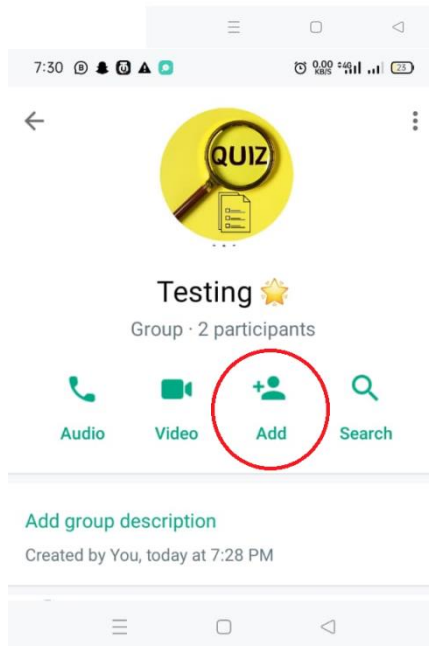
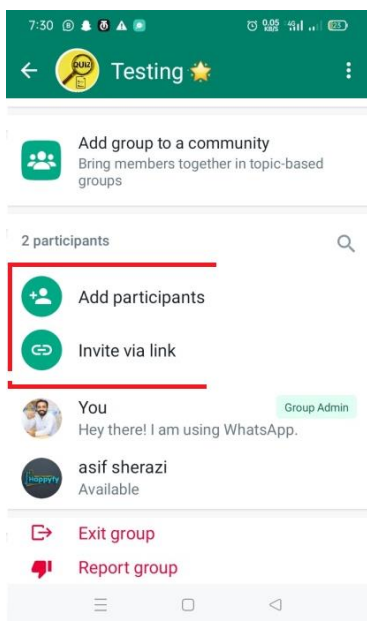
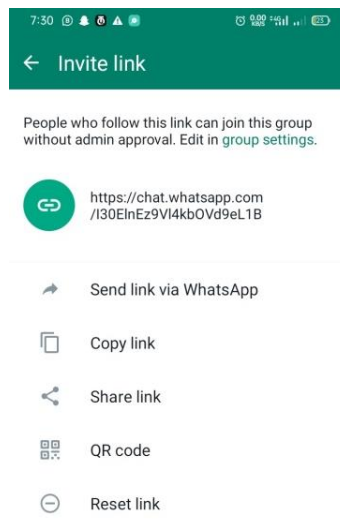
- Open the group chat, then tap the group subject.
 - Alternatively tap and hold the group in the **Chats** tab. Then, tap More options >Group info
- Tap **Group Permissions**
- Tap “**Edit group settings**” to allow **All participants** or **only admins** to edit the group info.
- Tap “**Send messages**” to allow **All participants** or **only admins** can send messages.
- Tap “**Add other participants**” to allow **All participants** or **only admins** can **Add participants** in a group.
- Tap “**Approve new participants**” to turn on and off this option.
 - *When turned on, admins must approve anyone who wants to join the group.*
 - *When turned off, this group is open for people to join without admin approval.*



How to add Participants in a Group:

There are three ways to add a participant in a group after creation.

- Click on add icon after taping **Group** subject.
- Add using **Add Participants**.
- Invite via link.

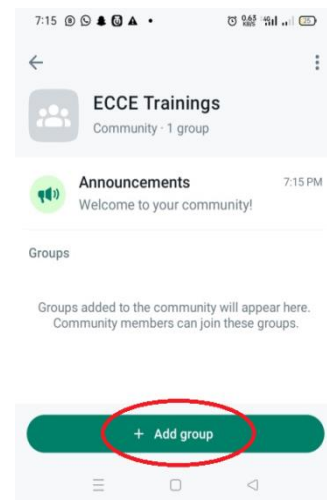
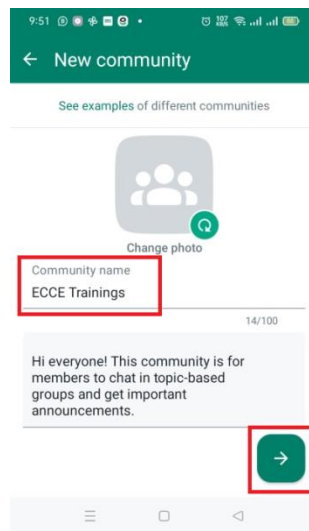
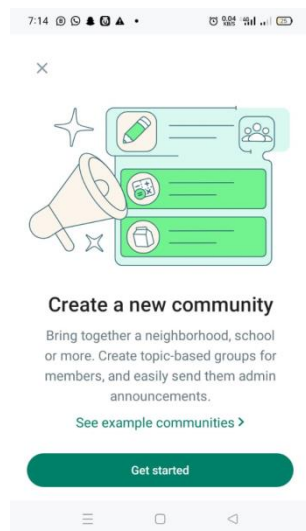
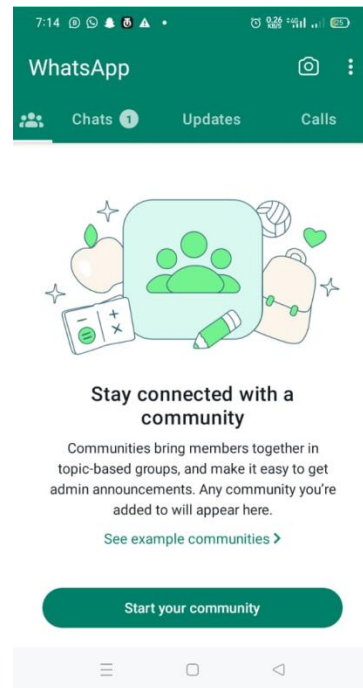


How to create WhatsApp Communities

WhatsApp Communities is a new way to organize your WhatsApp groups under one umbrella and connect all sub-group members, which can be helpful if you have created different groups of different classes you, can connect all of them via communities. Every single announcement from admins will be sent to in all groups which are connected in a community.

Steps to open a community:

- Tap on the new communities tab at the top of your chats on Android.
- You can then enter the community name, description, and profile photo.
- You can **Create a New Group** or **Add an Existing Group**.



When finished adding or creating groups, click the green check mark icon to create your community.

Extra Bit...!
In a community you can only add groups you created, not groups you are only a member of.

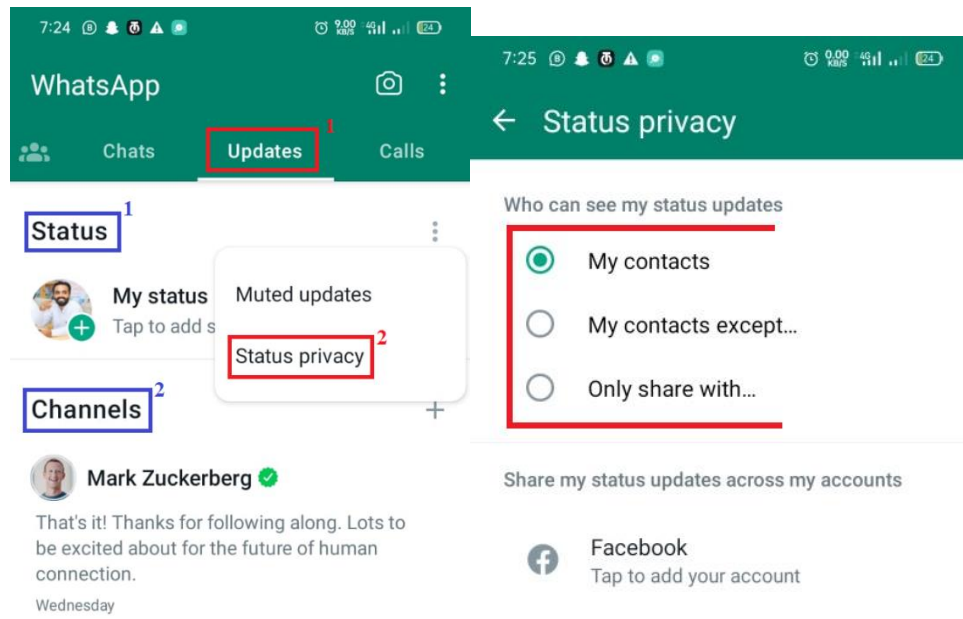
Updates Tab

Updates tab is new home of **WhatsApp Status**.

A new feature of **Channels** is also added in this tab.

Status Privacy

You can set **privacy** for your **status**. It means that you will define who will be able to see your status updates and whom you have to restrict.

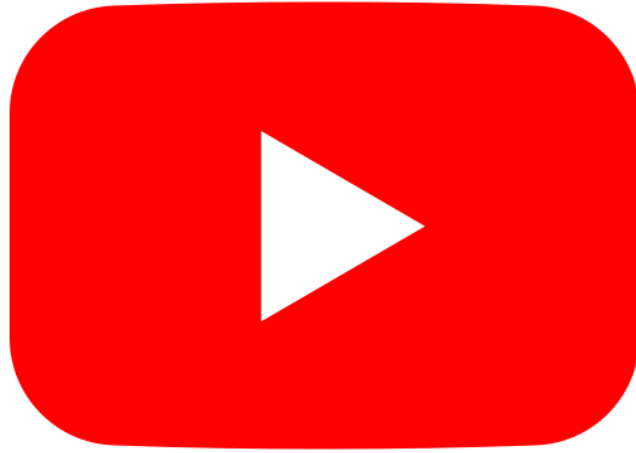


Channels

Get information and relevant updates directly in **WhatsApp** by following the **channels** of people and organizations that interest you. Follow a channel to get updates like text, links to information, photos, or videos from them. Only the creator can send updates in channels.

WhatsApp Web

WhatsApp Web is a popular method to use WhatsApp on computers. It lets you easily reply to messages and chat with your contacts while working on a desktop or laptop.



YouTube

YouTube is a free video sharing website where you can watch videos and also like, share and comment other's videos. You can even create and upload your own videos to share with others.

How to use YouTube?

You can simply open www.youtube.com in web browser and watch the videos of your choice any time. But to like or comment on any video you must be Sign In with your Google account.

Use of YouTube as a Teacher/Leader

- Teachers can show different educational videos relevant to the subject to their students, this will leads toward effective learning.
- Teachers can create their own video and upload on YouTube channel where students can easily watch those videos online for learning any time.
- School leaders can promote their school activities using YouTube to build up school repute in the society.

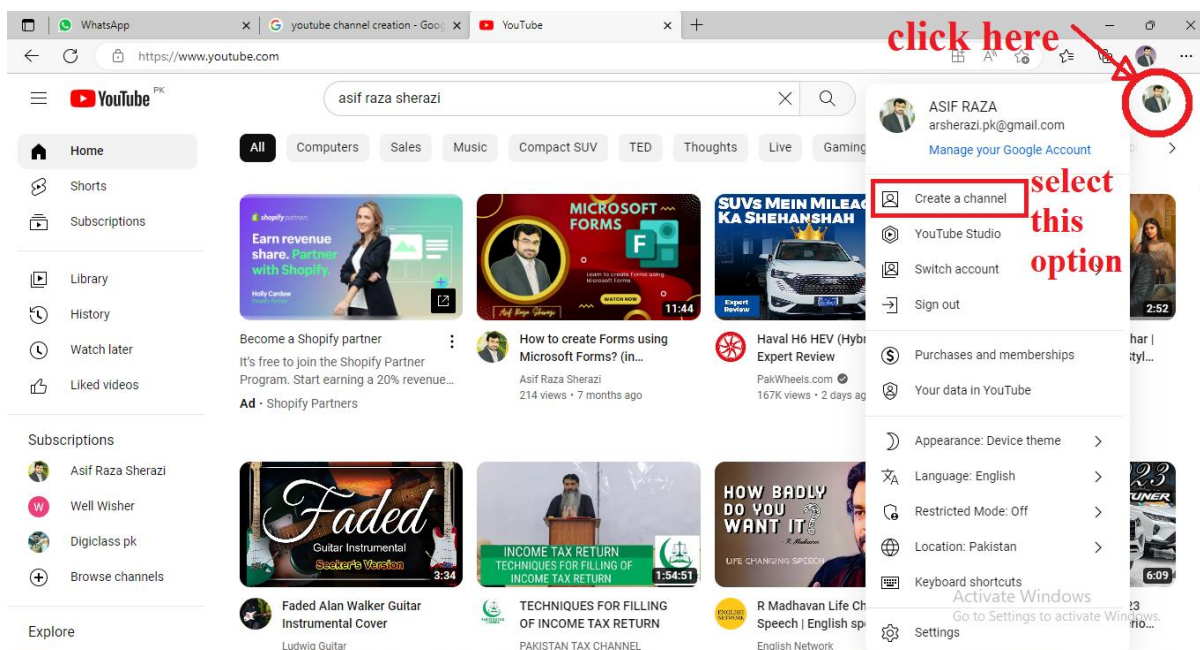
How to create a YouTube Channel?

A channel is a member's personal presence on YouTube, similar to other social media sites. To upload your own videos on YouTube, you have to create a Channel on YouTube.

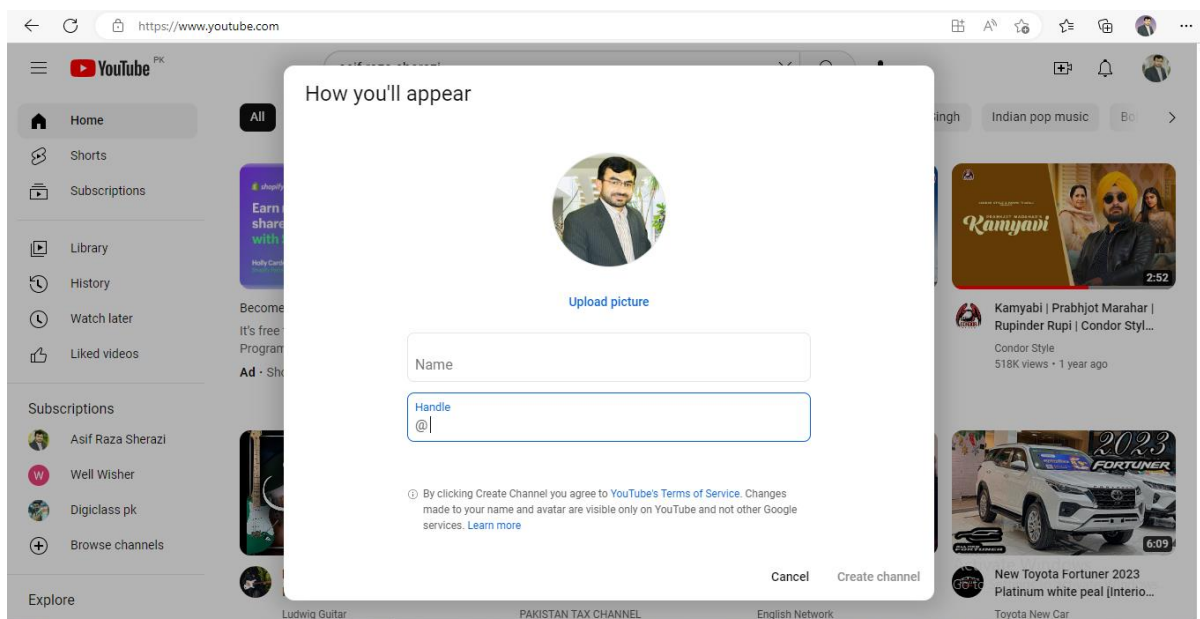
Here are the steps to create a YouTube channel.

- Open www.youtube.com in web browser.
- **Sign In** with your Google account.
- Click on your account icon on the upper right corner of the screen as shown in below window. A short screen will appears.
- Select **Create a Channel** option.

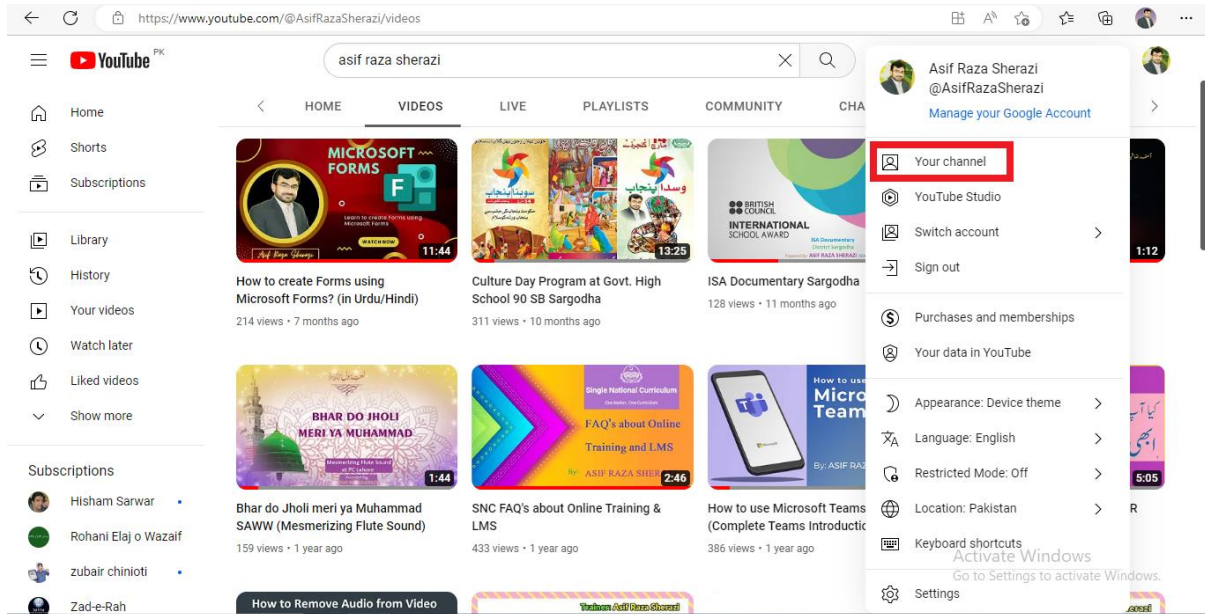





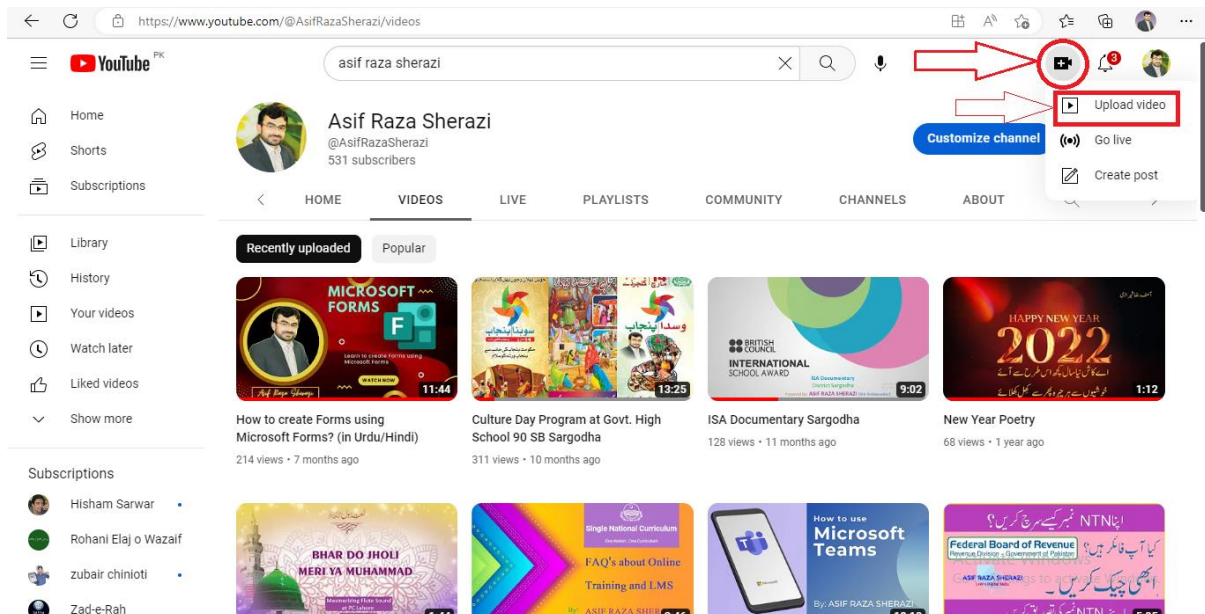
- After that a new window will appear, here you will type your channel name.
- You can select handle of your own choice subject to the availability.
- Click on **Create Channel**,
- Your Channel will be created.



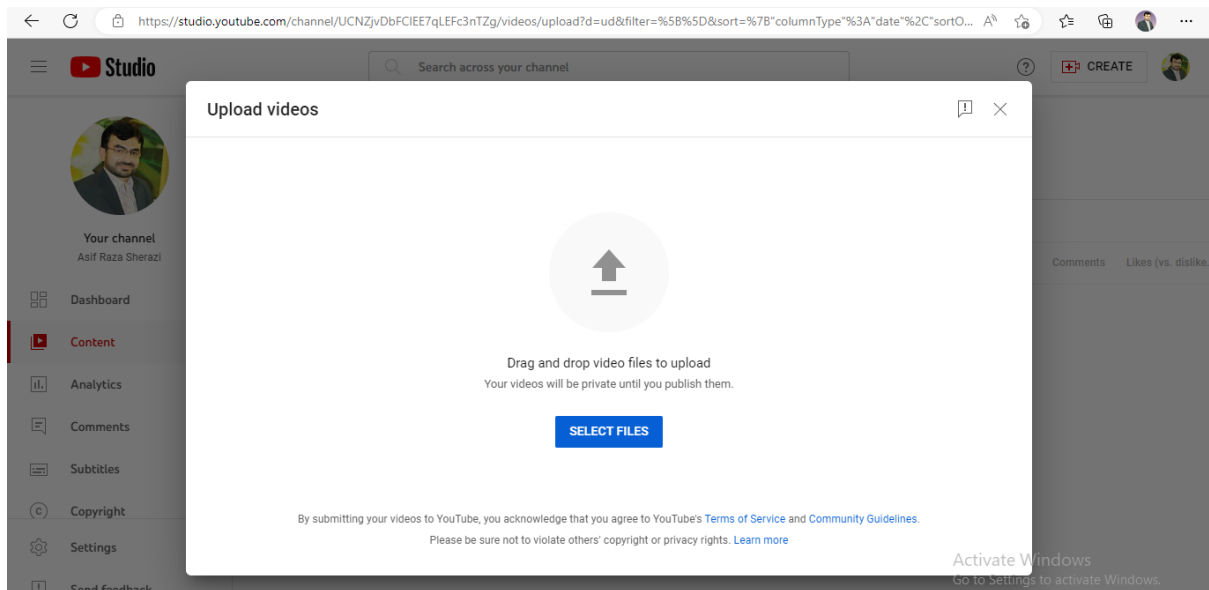
- Now Open Your Channel by clicking on your account icon as shown in below screen and click on **Your channel** option.



- Your YouTube Channel will be opened.
- To upload your video on YouTube channel click  icon as shown in below screen.
- Then click on **Upload video** option.

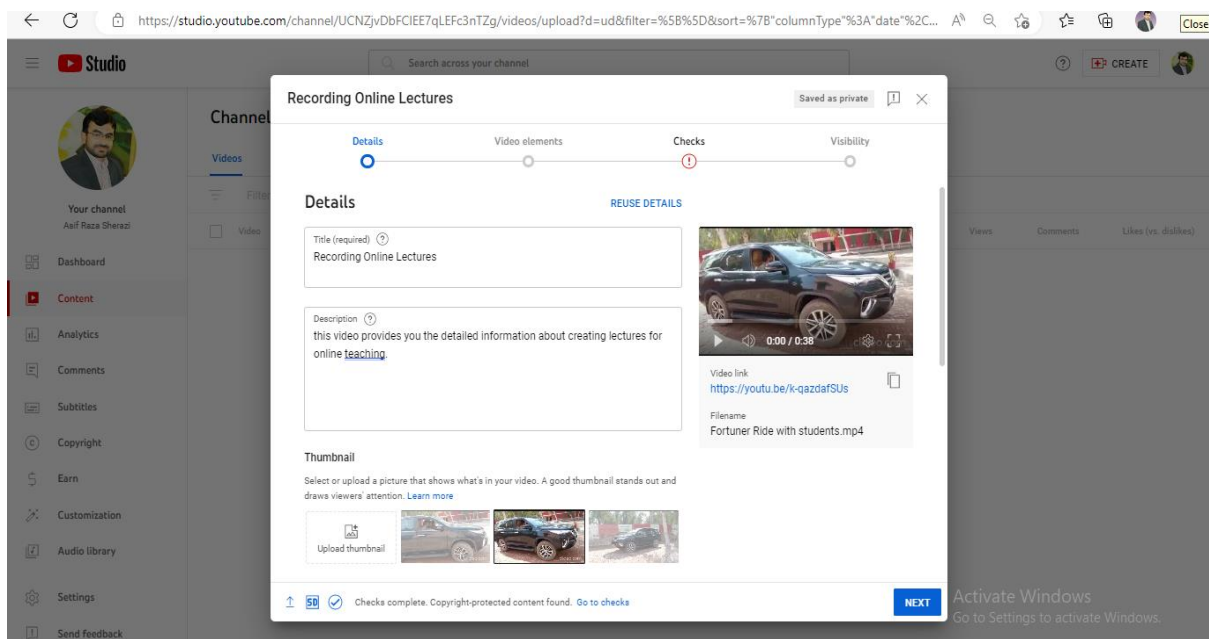


- In new window click on **SELECT FILES** option and browse and select the video from your computer which you want to upload.

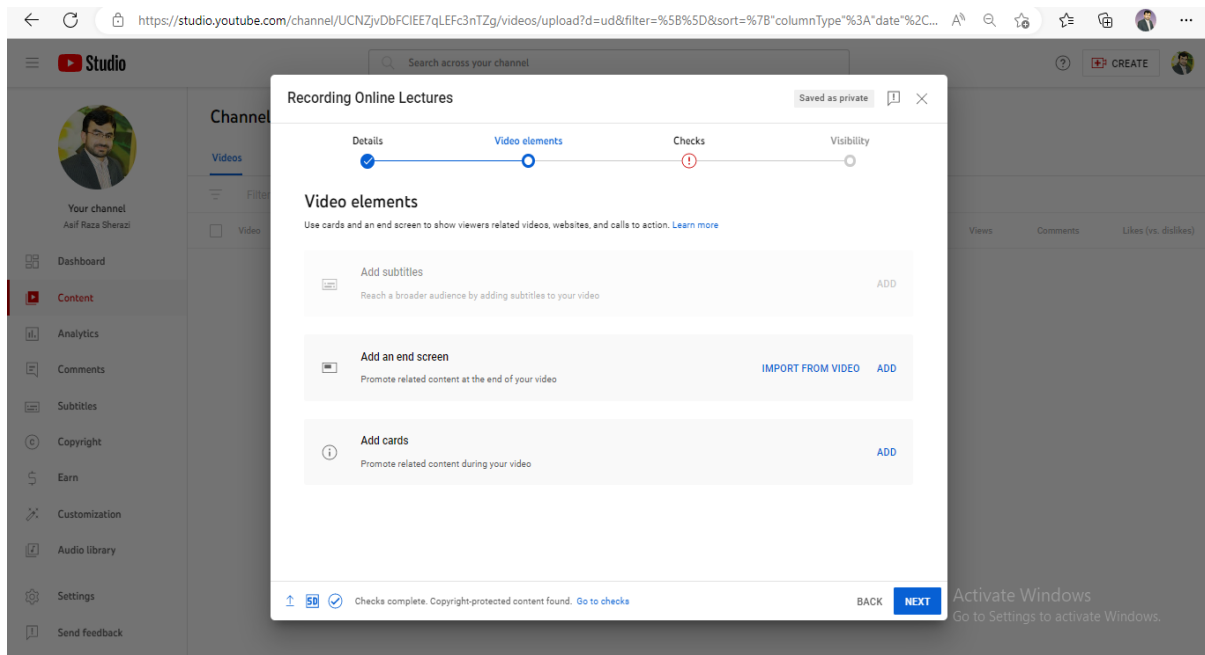


After selecting the video a new window will appear.

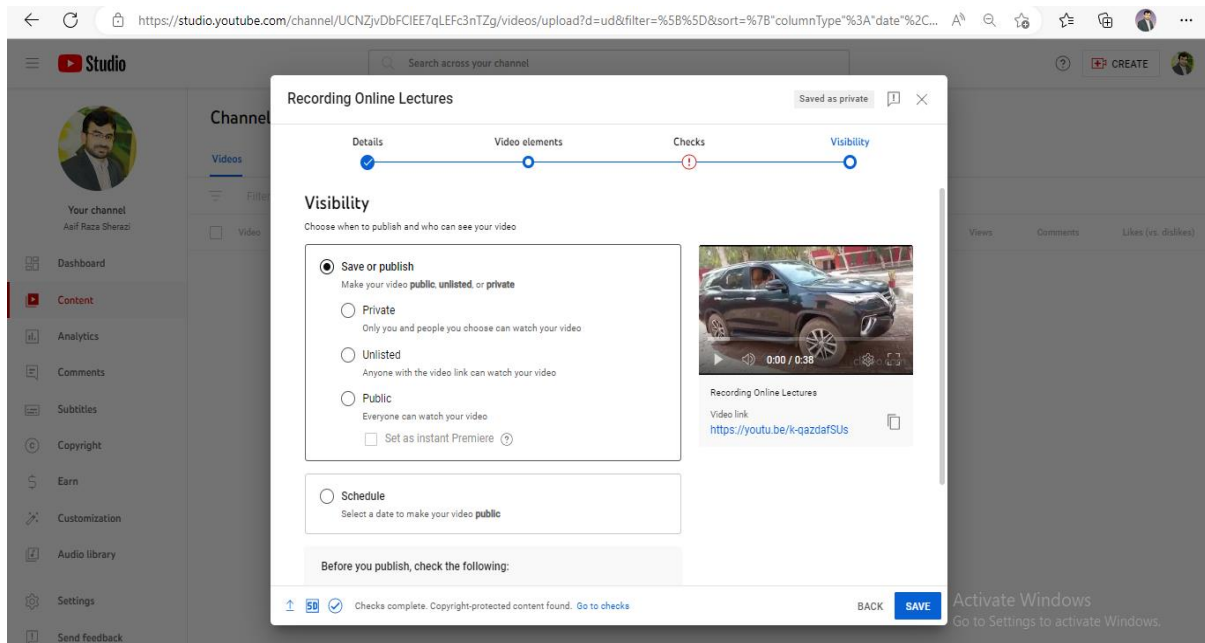
- Type the **Title** (attractive name of the video) and **Description** of the video and select the thumbnail (picture shown on YouTube video) and click on **Next** button.



- In new appeared screen again click on **Next** button.



- In below screen select **Public** option and click on **SAVE** button.
- Your video will be uploaded on your YouTube channel.



- Your video will be shown on your YouTube channel as shown in below screen. Here you can edit video Title, Description and Thumbnail any time.
- You can also see the details of **views, comments** and **likes** here.

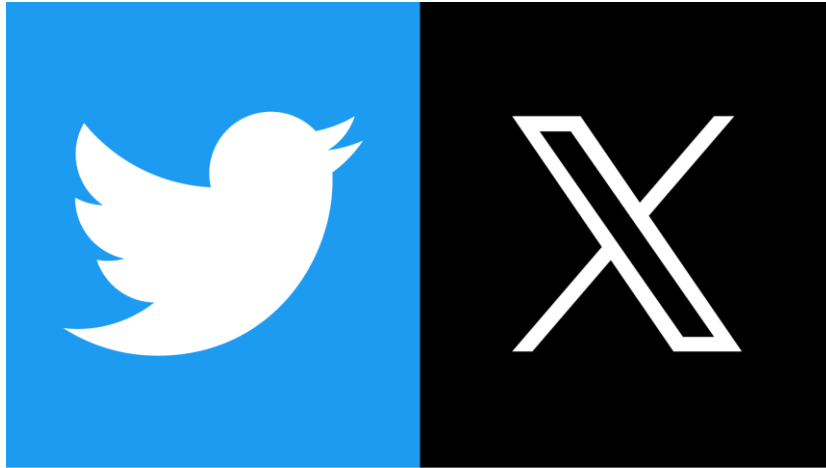


Beginners ICT Guide for Educators and School Leaders

The screenshot shows the YouTube Studio interface for a channel named 'Your channel Asif Raza Sherazi'. The 'Channel content' section is active, displaying a list of videos. The table below summarizes the content shown in the screenshot.

Video	Visibility	Restrictions	Date	Views	Comments	Likes (vs. dislikes)
<input type="checkbox"/> Recording Online Lectures this video provides you the detailed information about creating lectures for online teaching.	<input type="checkbox"/> Draft	Copyright				EDIT DRAFT
<input type="checkbox"/> How to create Forms using Microsoft Forms? (in Urdu/HI... In this tutorial you will easily learn the complete method of creating forms and about the form access settings and timer...	<input type="checkbox"/> Public	None	Jun 19, 2022 Published	214	5	95.5% 21 likes
<input type="checkbox"/> Culture Day Program at Govt. High School 90 SB Sargodha A Punjabi Culture Day was celebrated on 14 March 2022 at Govt. High School Sargodha to introduce the new generation...	<input type="checkbox"/> Public	Copyright	Mar 16, 2022 Published	311	3	100.0% 39 likes
<input type="checkbox"/> ISA Documentary Sargodha The Journey of schools working for British Council's International School Award (ISA) under Global Connecting...	<input type="checkbox"/> Public	None	Feb 23, 2022 Published	128	0	100.0% 21 likes
<input type="checkbox"/> ISA Documentary Add description	<input type="checkbox"/> Unlisted	None	Feb 22, 2022 Uploaded	145	0	100.0% 5 likes
<input type="checkbox"/> New Year Poetry اے نیکش تا سال کچھ شعر سے کہو	<input type="checkbox"/> Public	None	Jan 1, 2022 Published	68	11	100.0% 19 likes
<input type="checkbox"/> Bhar do Jholi meri ya Muhammad SAWW (Memorizing FI...	<input type="checkbox"/> Public	None	Oct 24, 2021	159	1	100.0%

After uploading your video, you can share your video link with your friends, students and to anyone.



twitter / 

Twitter / X

X (formerly Twitter) is an online news and social networking site where people communicate in short messages.

Common Uses

Some people use X to discover interesting people and companies online, opting to follow their tweets.

For Teachers & School Leaders

Teachers and school leaders can get many educational ideas and news by following their favorite educationist and news agencies.

Like all the other ministries of Pakistan, education ministries Federal and Punjab as well as **QAED** have their **Twitter/X** accounts. By following them we can stay updated with verified news and other developments in education sector.

Posts / Tweets

Everything you shared on **Twitter/X** is known as **Post (formerly tweet)**. A **Post** is limited to 280 individual characters (letters, spaces, and punctuation marks) for non-verified users. However for paid users (blue tick holders) its 10,000 characters and they can also post long videos.

Interface of Twitter/X

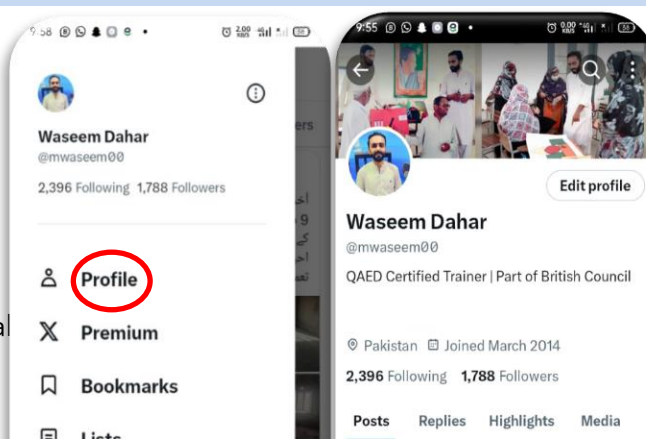
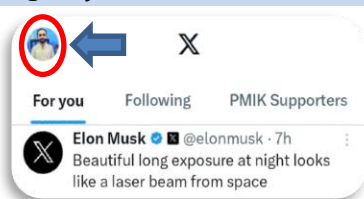
Twitter/X has a simple interface, one can easily understand after using few times.

Sequence is as (at bottom from left to right):

- **Home:** Where you'll everything happening (posts).
- **Search:** You can search across X (people or posts).
- **Communities:** Posts from communities you're part of.
- **Notifications:** Notifications of all the activities (Likes, comments etc.)
- **Direct Messages (DM):** You can send direct messages to people you're following.

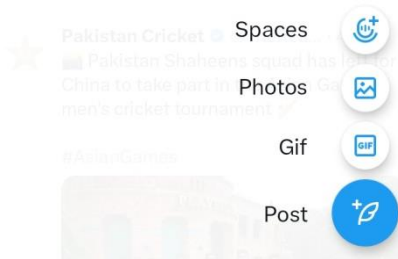


Navigating to your Profile



To **post** anything click on the + icon.
Following options will appear:

- Post
- Gif
- Photos
- Spaces

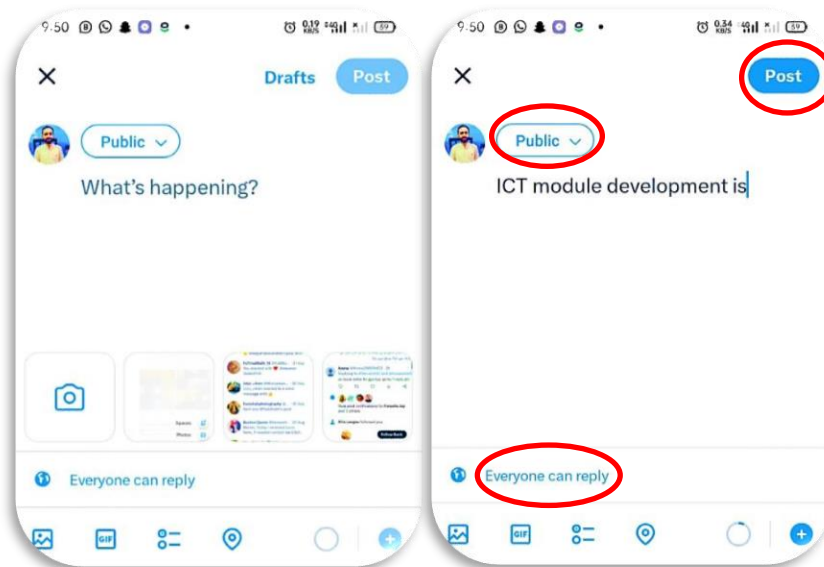


Post/ Tweet Something

To post anything click on **Post**. A new window showing **What's happening** will appear, write anything or add photos, create polls, share location or add Gif then click **Post**.

Before Posting following settings you may change:

- Post will be **Public** or to share in a **circle** (specific people).
- **Everyone can reply** or specific people or people you follow.



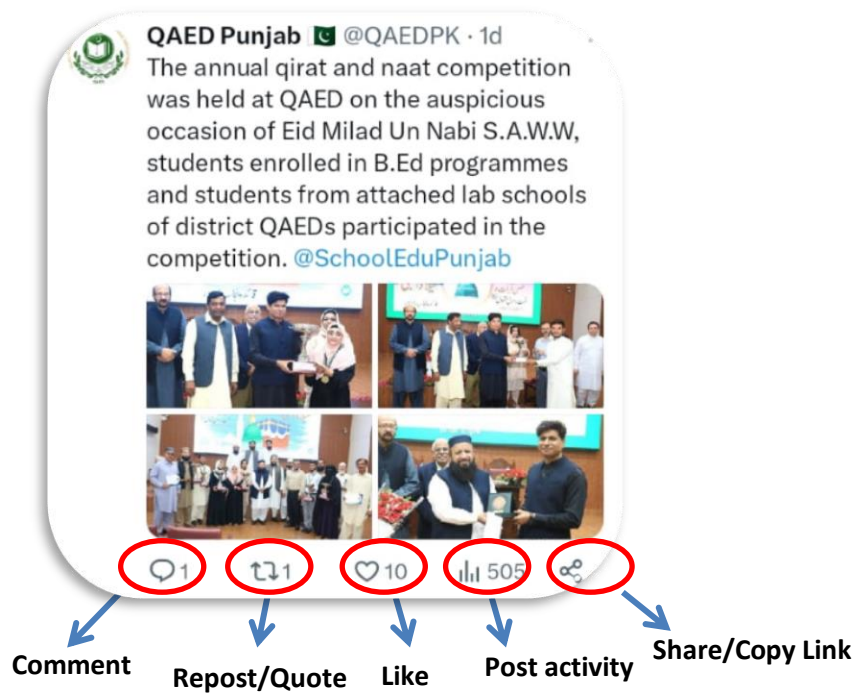
#Hashtags

Hashtags are frequently used with posts and it's a good practice to use relevant hashtags with your posts, it will increase your reach. People search specific topics using these hashtags.



Comment, Repost/Quote, Like & Sharing a Post

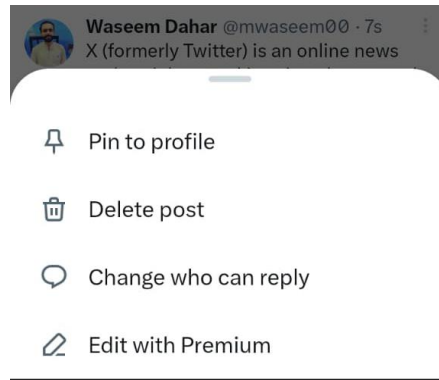
There is a simple way to do all these above mentioned things.



If you want to **pin** your post (it will show on top of your post feed) or **delete** or **change who can reply**, Click on the three dots of your **Post** next to your username.



Beginners ICT Guide for Educators and School Leaders



Edit option after you have posted is only available for paid users.

SESSION- 15

HANDS ON PRACTICE ACTIVITIES & EVALUATION TEST

Azam Academy for Educational Development, Punjab



**Office of the District Education
Officer**
District _____

To

The Chief Executive Officer (DEA),
Punjab.



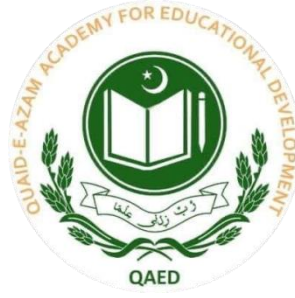
Beginners ICT Guide for Educators and School Leaders

Subject: **Result of Typing Test**

With reference to your letter No. 476/ACCTT dated 30/10/2024 regarding the typing test for the promotion of Class IV employees as Junior Clerk. The said test has been conducted on 15/12/2023 and the result is attached herewith for your kind perusal.

Headmistress

Govt Girls High School _____



Quaid-e-Azam Academy for Education Development Sargodha

4-Days Training of ESE Teachers on Early Childhood Education (ECE)

w.e.f. 09-04-2018 to 12-04-2018

REGISTRATION FORM

Name (as per Matric Certificate) _____

CNIC Number _____ Date of Birth _____

Designation _____ BPS _____

Qualification: Academic _____ Professional _____

Present Place of Posting _____

EMIS Code of ECE School _____ Mobile # _____

E-mail _____

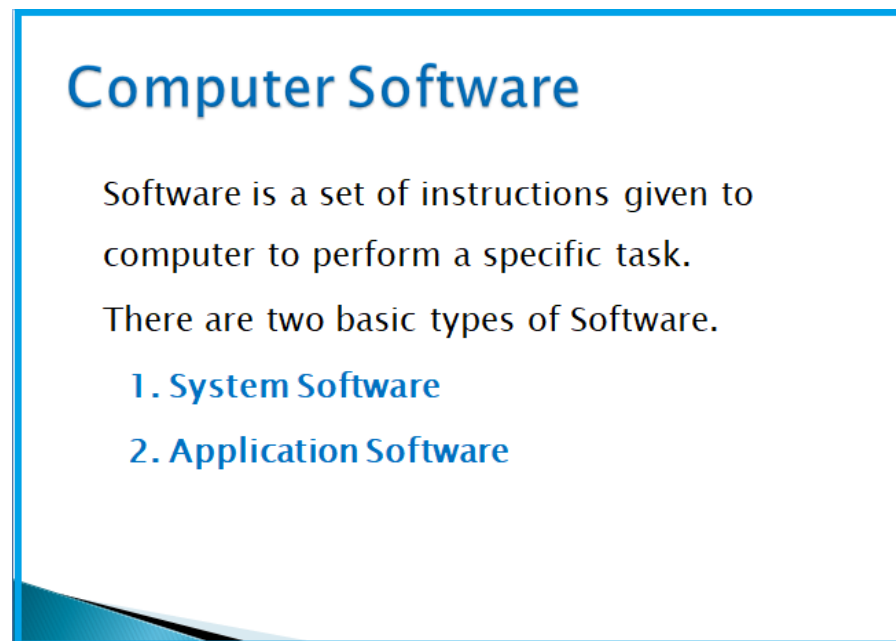
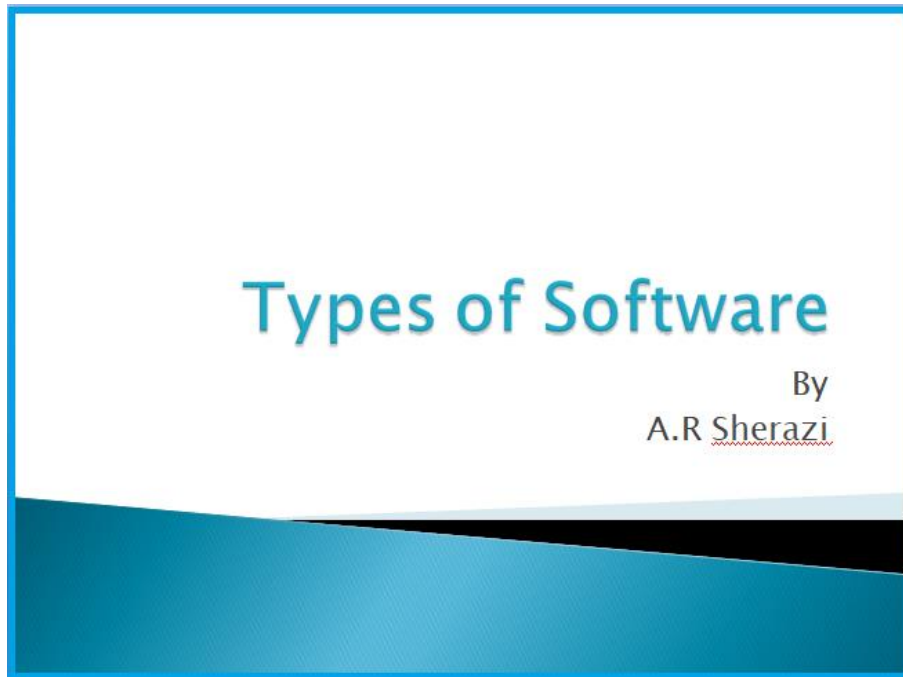
Residential Address _____

Date _____

(Signature)



Create a Presentation in Microsoft PowerPoint according to the given Format.



System Software

- ▶ System software is a type of computer program that is designed to run a computer's hardware and application programs.



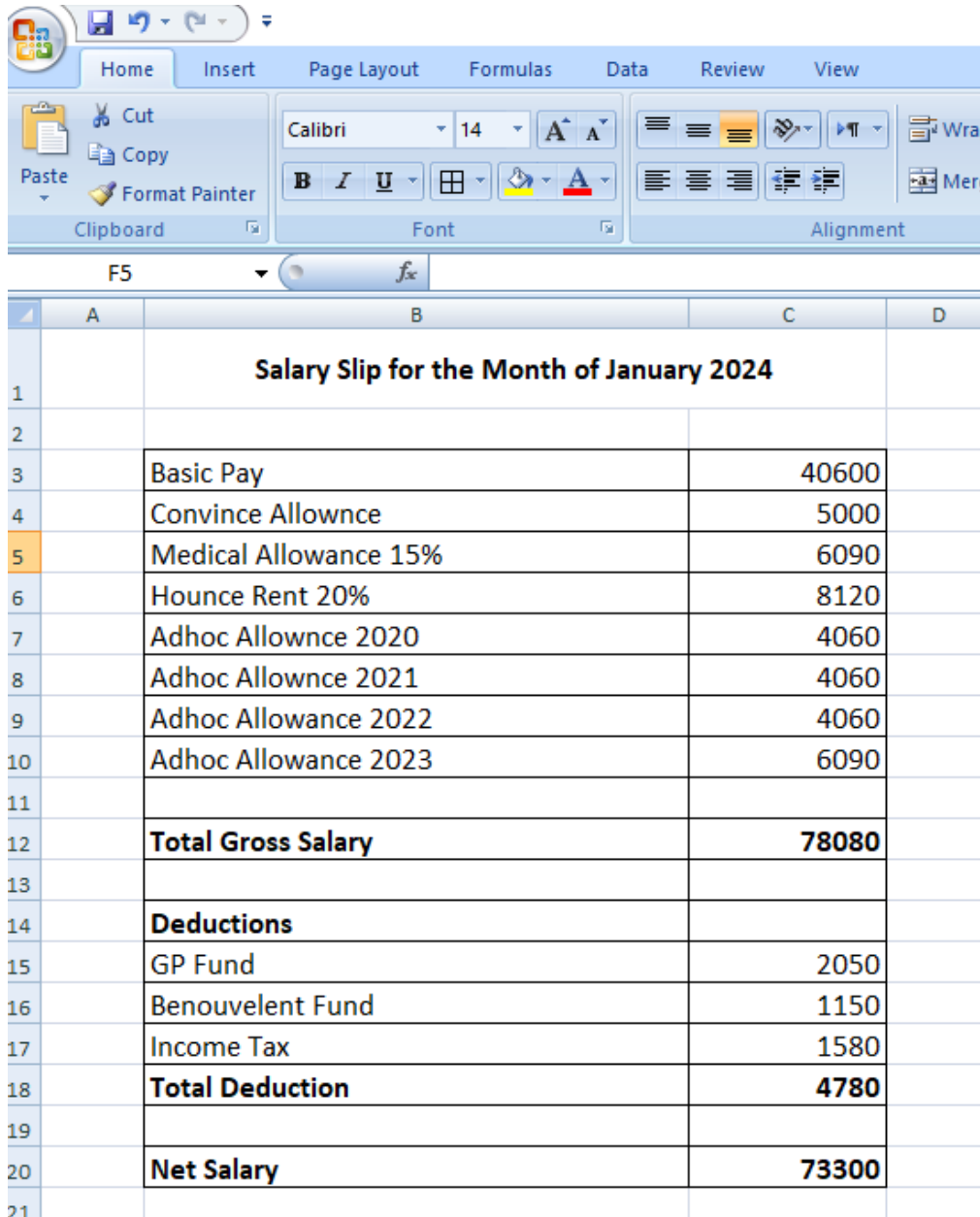
Application Software

- ▶ Application software (App) is a kind of software that performs specific functions for the end user by interacting directly with it. The sole purpose of application software is to aid the user in doing specified tasks.



Create a Salary Slip in MS Excel according to given format using different formulas or functions.

- Auto calculate 15% of basic Pay medical allowance using formula
- Auto calculate 20% of basic Pay house rent using formula
- Auto calculates Gross Salary and Total deductions using SUM function.
- Auto calculate Gross Salary using formula



	A	B	C	D
1		Salary Slip for the Month of January 2024		
2				
3		Basic Pay		40600
4		Convince Allowance		5000
5		Medical Allowance 15%		6090
6		Hounce Rent 20%		8120
7		Adhoc Allownce 2020		4060
8		Adhoc Allownce 2021		4060
9		Adhoc Allowance 2022		4060
10		Adhoc Allowance 2023		6090
11				
12		Total Gross Salary		78080
13				
14		Deductions		
15		GP Fund		2050
16		Benouvelent Fund		1150
17		Income Tax		1580
18		Total Deduction		4780
19				
20		Net Salary		73300
21				



Create a Result sheet in MS Excel of class 8th. Calculate the total marks, percentage using formula.

Result Sheet of Class 8th Iqbal

Govt High School Kot Miani Faisalabad

Roll No	Name	Eng	Urdu	Math	G.Sci	Isl	S.Std	Total marks	Obtained marks	%age



ADDITIONAL READING MATERIAL

Digital Citizenship

Societies are evolving with the passage of time. We use technology for communication instead of writing letters, sending faxes, or meeting with people. The Internet and smart devices have become an essential part of our daily routine.



The use of social media and the Internet is prevailing day by day. This massive increase in the use of digital means of communication resulted in increasing data security issues also.

Let us also have a look at the safety aspects we need to consider to create a healthy cyber environment.

● Internet

The Internet is also called 'the NET' or 'Network of Networks', which means International Network. It is a network used all over the world where users located at different locations can communicate and exchange information with each other. It is a collection of networks that are connected and form a global network.

The Internet provides you the services of online shopping, electronic banking, advertisement, data sharing communication, education, entertainment, etc. The Internet has transformed our lives and made us more digitized.

Advantages of Internet

The usage of Internet has increased over the years as it has many advantages. Let us discuss some of its advantages:

- **Treasure of Information**
Internet is a hub of information. We can search and access any type of information on any topic through the Internet. It is used extensively by people to do their projects and research.
- **Web Services**
Internet provides many useful services like chatting, email, video conferencing, etc. which help people to connect all around the world. Using these services, organizations can exchange information and conduct meetings with their employees which are located at different places.
- **Promoting Business**
Internet also helps companies to promote their products online through websites and social networking sites. It allows users to sell their products online. It also allows being in contact with the customer 24/7.
- **E-Learning**
Internet has changed learning from physical classroom to virtual classrooms. These days students can study by sitting at home in their comfortable timings. Internet is also used by teachers as well as students to collect information on various topics.
- **Entertainment**
Internet is used by people for entertainment. People can listen to music, watch movies, and play games on the Internet. The Internet allows people to read newspapers and magazines online. There are various services on the Internet like Newsgroups and Blogs where people can contribute as per their interests.
- **Internet Banking**
Conventional banking systems are getting obsolete now. Customers use their credit and debit cards for payments.



Do You Know?

Blogs are virtual diaries created by people to share their hobbies, thoughts with like-minded people.

Cash is withdrawn from ATMs (Automated Teller Machines) which are available 24/7 all day and night. Mobile banking has taken the banking system to a high level. From your mobile phones, you can pay your bill, transfer money, pay for shopping, top up your mobile phone SIM cards, and many more.

Disadvantages of Internet

The Internet has many advantages for users. But, as we know, excess of everything is bad. So, the Internet has some disadvantages too.

- **Violent Information**
Several websites on the Internet have violent videos and images. This type of content can disturb the mental health of children as well as adults.
- **Wastage of Time**
It is a waste of time as with the excessive use of Internet, people get addicted to it and spend a lot of time surfing without any useful outcome.
- **Virus and Spam Attacks**
Internet has also increased the cases of virus attacks. Users can lose their data and programs in these virus attacks.
- **Loss of Person Information**
We share our personal information over the internet that can be misused by cyber criminals to harm us.

● Social Media

The website or program known as Social Media is where users can share their content. Additionally, it facilitates online conversations with other users. Millions of people all over the world are actively using it because of its enormous popularity and usefulness.



Advantages of Social Media

Social media has a lot of benefits.

- You can use it for educational purposes.
- You can use it for entertainment.
- It is easier to communicate and share information.
- You can create your brand and content to share original material.
- It is easier to get updated information and news.

Disadvantages of Social Media

Social media also has several drawbacks, but fewer than its advantages. Some of its advantages include:

- It may also be the cause of a great deal of inefficiency.
- Lack of privacy can lead to identify theft, stalking, and other problems.
- As it is easy to get distracted from your work and loose focus when using social media, it may also be the cause of a great deal of inefficiency.
- It can be quite damaging to not know how to respond to negative feedback and to become easily distracted.
- Your shared data may be used against your after tempering it.

● Digital Media Bias and Messaging

The idea that the media is reporting the news in a biased or partial way is known as media bias. When digital media looks to favor one point of view over another while covering the news, this is known as Digital Media Bias.

We could use the example of the difference between two news broadcasters that have very different audiences. They tend to be biased in what they report and how they report it due to ideological and political views.

Digital media is heavily used for messaging purposes as well. Many big platforms are used for messaging purposes as well. Some of them are:

- Twitter
- Instagram
- WhatsApp
- Facebook

● Ethics and Ethical Use of Digital Environment

Ethics

At its simplest, ethics is a system of moral principles. They affect how people make decisions and lead their lives. Ethics is concerned with what is good for individuals and society and is also described as moral philosophy.

Digital Environment

The digital environment is an increasingly popular tool in family and child research that is argued to pose new ethical challenges. There are many issues in digital environments, such as:

- Participant Privacy
- Confidentiality
- Anonymity.



These concerns apply to internet research across all disciplines, not just those involving families and children.

Ethical Use of Digital Environment

If not handled ethically, using a digital environment can be dangerous. The following is a list of some ethical principles you should follow when using the digital environment:

- Be respectful
- Protect your reputation
- Protect your privacy
- Trustworthiness and honesty
- Doing good and preventing harm
- Avoidance of conflicts
- Fairness
- Accountability

Identify Improper Use of Computer Resources

Everything has its boundaries. When that limit is violated, both you and other are at risk. The following are some examples of inappropriate computer resource use:

- Actions that endanger people’s life or harm their property.
- Actions that break the law.
- Uses that breach information confidentiality.
- Actions that encourage others to break the law.

An employee using the company’s computer for personal use could serve as an example. The company prohibits its employees from using the company’s computer for personal benefit. A cyberbully is another example of the person who uses of computer resources improperly. He unlawfully stalks someone online and spreads hate against them using a computer.

● **Cyber Crime with Preventive Measures**

Cybercrimes are offences that are committed using computers and smart devices connected to the Internet. The victims of cybercrimes can be organizations or individuals. Most cybercriminals use e-mails, social media websites, or pirated software as a medium to trouble their victims.

It is important to remember that data once shared over the internet is rarely deleted completely. Cybercriminals use this data unethically to trouble their victims.

Let us discuss some of the most used ways to commit cybercrimes.

E-mail Spoofing

When someone sends e-mails that appear genuine from a trusted e-mail ID but, in reality they are not to be trusted. We call it E-mail Spoofing.

For example, a user may receive an email from a portal or social media platform where the spelling of the service provider or email ID has been slightly changed.

For example, `mailto:customer@tridentportall.com`.

Notice that the spelling of ‘portal’ is incorrect. These emails contain links that will direct the user to another web page where the user would be asked to enter information which means the user ends up providing personal credentials to cybercriminals. This is also called Phishing.



Do You Know?

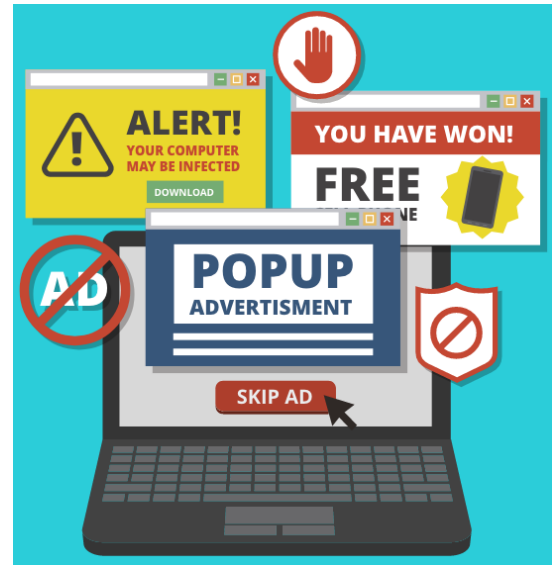
The best defense against phishing assaults is human intellect and comprehension.





It refers to the sending of bulk mail by an identified or unidentified source. Sometimes, certain businesses send bulk-advertising mail to many accounts at the same time. Some people intentionally send bulk mail to a user until the mail server runs out of disk space.

Some people send virus-infected applications and files through the internet via emails, chats, games, etc. to get access to your smartphone and personal data. These emails may contain a document (Word or Excel file) with malware (a dangerous program that can impact your computer) attached to it. Opening such documents result in malware installed on your computer or mobile.



Using reputable websites to download files and not opening doubtful e-mails are some ways to counter these threats.

Some cybercriminals send emails informing the victim that they have won a lottery or a surprise gift. The cybercriminal then asks for personal details and bank details for transferring the winning amount. Cyber criminals may also ask the victim to deposit a small processing fee to lure the victim to transfer the winning amount.

These emails are not to be trusted and one must not reply with any personal information. Further, these must be immediately deleted from the email account to avoid accidental access in the future.

Measures to Avoid Spam

To avoid spam, we can take the following measures:

- Preview your message before opening them.
- Do not click any link in a spam email otherwise, you will invite many such emails in your inbox.
- Do not reply to a Spam email.
- Do not forward an email receiving from someone you do not know to a list of people.

Email account Hacking



It is another common method used by cybercriminals to trouble victims. Using malware or other tricks to obtain your email ID and password, cybercriminals can gain access to your critical information like social media accounts, bank accounts, etc. Cybercriminals may also send offensive emails to a victim's contacts via hacking.



Do You Know?

Cracking refers to the act of breaking into systems to steal or destroy data. Crackers may disturb applications by using malware or changing the program of the applications.



Measures to avoid Hacking

To prevent unauthorized access to your computer and internet we can take the following measures:

- Keep changing your passwords.
- Keep updating your Operating System.
- Do not plug into devices you are not sure about.
- Always look at the green lock sign at the address bar of the window before accessing any website.
- Always download trusted applications from the internet and check permission and authentication.

Cyber Troll

In Internet slang, a troll is a person who starts quarrels or upsets people on the internet to distract and create discord by posting mean and unwarranted messages in an online community.

A cyber troll refers to a person who purposely posts opposing, sarcastic, demeaning, or insulting comments about something or someone.



Social Engineering

Social engineering is a technique used by cybercriminals to Cybercriminals try to interact with the victims to under personal information and/or commit some hard to them.

Cyber Bullying

Cyber Bullying refers to the use of the Internet, e-mail, instant messaging, chat rooms, or social networks, such as Facebook, Twitter, etc. to harass, demean, embarrass or intimidate someone else.

Measures to prevent Cyber Bullying

- Remember never to share personal details such as age, address, date of birth, etc. with unknown people on social media.
- Restrict access to your data on social media platforms. For example, only your friends must be able to see any pictures on Facebook.
- Try avoiding friend requests from unknown people on social media.
- In case, any post hurts or upsets you talk about it to your trusted set of people like family or friends instead of posting aggressive replies.
- If your parents/ elders feel the need, they can also contact the local police station to complain about the cyberbullying.
- Never install unwanted software and applications like online games, etc.



Do You Know?

Qu

Verbal harassment is the most frequent kind of bullying, followed by social harassment, physical bullying, and cyberbullying.



Online Transaction Fraud

Most of you may be using banking services such as debit cards, credit cards, net banking, etc. it is important to be aware of this type of cybercrime.

Online transaction fraud refers to the illegal withdrawal or transfer of money from one bank account to another by a cybercriminal. Online transaction frauds generally take place when a cybercriminal steals a user's login credentials, bank account details, credit card details, etc.

Types of Online Transaction Frauds

Identity Theft: Sometimes, cybercriminals deliberately use another's identity to gain a financial advantage over someone else. Cybercriminals may also pose as someone else to obtain credit and other benefits in the other person's name.

Job Frauds: Cybercriminals portray incorrect details as an employer.

Banking Frauds: Some cybercriminals fraudulently obtain money from users for investment by posing as a bank or other financial institution.

Measures to Safeguard Ourselves from Online Fraud

We can safeguard ourselves from online fraud by keeping in mind the following points.

- Regularly update your banking passwords and PIN of the debit/credit cards.
- Be sure to check for the bank's security certificate details.
- Also, check for various signs such as green address lines, lock signs or websites, and HTTPS in the address bar to confirm you are visiting a secure bank website.
- Never share your bank and credit card details such as your online account password, card number, PIN, OTP, etc. with anyone.
- Always check the website URL starts with HTTPS. The website URL with HTTPS encrypts your data on the website and protects it from any kind of tampering.
- Avoid making online transactions using public Wi-Fi or a computer in a cybercafé.
- Review the monthly statements of your bank account and credit cards to detect any unrecognized transactions.
- In case the credit/debit cards are stolen or lost, call the bank immediately and block your card/bank account.
- Never install pirated software on your mobile or computer. It is not only illegal but may also compromise the security of your devices.

- **Intellectual Property Rights**

Intellectual property is a term that refers to the legal property rights of a person over creations of his/her mind, both artistic and commercial. Under Intellectual Property Rights, the owners of the property are granted



exclusive rights over their creation. These creations could be artistic, musical, or literary.

Types of Intellectual Property Rights (IPR)

There are three main types of Intellectual Property rights:

Copyright: It is the legal right given exclusively to the person for a fixed number of years to publish, and record the literary, artistic, musical, or musical use of his or her work. Copyright of work lasts even after the death of the originator.

Patent: It is the right that gives an inventor the complete right to make, use, and sell his or her work for a specific time period. Usually, the validity period for a patent is 20 years.

Trademark: It is a symbol, word or logo legally registered or established and used as representing a company or a product. Trademarks help to protect brand names, logos, and the design of the product. The validity period of a Trademark is 10 years and can be renewed after that.

Measures to Protect Intellectual Property rights

We can take the following measures to protect Intellectual Property Rights:

- Do not share your business ideas with others.
- Have detailed drawings, descriptions, plans, and records that can prove it is your creation.
- As soon as you have a business name and logo for your idea, you should register those Trademarks right away.

● Plagiarism

It refers to the usage or imitation of the language and thoughts of another person projected as one's original work. It is considered a crime or fraudulent act.

Plagiarism as described by the Merriam-Webster dictionary is as follows:

- To steal and pass off ideas or words of another as one's own.
- To use another's production, without crediting the source.
- To commit literary theft.
- To present as new and original, an idea or product derived from an existing source.

Ways to Prevent Plagiarism

Some of the ways you can prevent plagiarism are:

- Use Citation-Citation refers to acknowledging the original writer and the source from where the material has been taken.
- Rephrase the matter.
- Use “ ” for statements quoted by another person.
- Encourage original ideas and use authentic resources.



● Virus

A virus is a type of software or malware that spreads between several computers and corrupts data. It targets the computer's data and software. Its primary goal is to disrupt or interfere with the systems so that data can be corrupted or even leak.

Some indications of a virus attack are listed down:

- Unwanted pop-ups that repeatedly appear.
- Modifications to your desktop or files.
- The system speed slows down and suddenly crashes. It can also make the computer shut down itself.
- You keep being logged out of your account.
- It sends out mass emails from your account to infect other machines with viruses.

Malicious activities are those that aim to compromise or corrupt the confidentiality of data or software in computers. There are numerous further varieties of malware and computer viruses. Some of the most common ones include:

Ransomware: It makes the victims' file inaccessible by disabling them. Once the ransom is paid, only then can they be accessed.

Spyware: It gathers information about the victims without their awareness. The information is then utilized to their benefits.

Malware for Mobile devices: This malware harms mobile devices through phishing and other means.

Keyloggers: They record the victims' keystrokes. It gathers private information or sensitive data like passwords.

● Cyber Safety

Cyber safety refers to the safe and responsible use of the Internet in order to safeguard one's personal information while not misusing anyone else's personal information.

We can take the following safety measures while using the Internet or computer:

- Install the most recent antivirus software on your computer.
- Use caution when entering your password on the internet.
- Do not respond to shady emails or strangers.
- Do not disclose your personal information to anyone online.
- Refuse friend requests from unfamiliar people.
- Always leave your privacy settings on.
- Be cautious when downloading.
- Be careful what you post on social media platforms.
- Encryption can be used to protect data privacy while transferring files between locations.

● Ethical Hacking

Not all hacking is destructive. Some hackers use this technique for national security, creating safer systems,

etc. This is known as ethical hacking. It is a legitimate practice to uncover potential data breaches and risks in a network or system. In order to find vulnerabilities that malicious hackers can exploit or eliminate, ethical hackers search the system or network.



Keyboard Shortcut Keys A TO Z

These shortcuts can save time and make working with text and documents more efficient.

Ctrl+A : Select all text

Ctrl+B : Bold text.

Ctrl+C : Copy tex..

Ctrl+D : Open font formatting window

Ctrl+E : Center text

Ctrl+F : Find a phrase

Ctrl+G : Go to a specific page

Ctrl+H : Replace text with another text

Ctrl+I : Italicize text

Ctrl+J : Justify text

Ctrl+K : Open insert hyperlink window

Ctrl+L : Left align text

Ctrl+M : Indent a paragraph from the left

Ctrl+N : Open new document or file

Ctrl+O : Open an existing document or file

Ctrl+P : Print a document

Ctrl+Q : Remove paragraph formatting

Ctrl+R : Right align text

Ctrl+S : Save the document or file

Ctrl+T : Create a hanging indent

Ctrl+U : Underline selected text

Ctrl+V : Paste any text or object that has been copied.



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Ctrl+W : Close open tab in a browser or a document in Word.

Ctrl+X : Cut text or object.

Ctrl+Y : Redo any undo action.

Ctrl+Z : Undo any action