Unit-V

Office Automation Tools: Introduction to Microsoft Word, Elements of word Processing and Working Objectives, MSWord Screen and its Components, Features of word, Introduction to MS-Excel, MS-Excel Screen and Its Components, Features of Excel, Manipulation of cells, Formatting of Spreadsheet and Cells, Formulas and Functions, Introduction to MS-PowerPoint, MS-PowerPoint Screen and Its Components, Features of PowerPoint, Working with MS-PowerPoint, Preparation of Slides, Creation of Presentation, Slide Manipulation and Slide Show, Presentation of the Slides

What is Microsoft Word

Microsoft Word is word processing software. It is developed by Microsoft and is part of Microsoft Office Suite. It enables you to create, edit and save professional documents like letters and reports.

Microsoft word is a word processor software developed by Microsoft in 1983. It is the most commonly used word processor software. It is used to create professional quality documents, letters, reports, resumes, etc and also allows you to edit or modify your new or existing document. The file saved in Ms Word has .docx extension. It is a component of the Microsoft Office suite, but you can buy it separately and is available for both Windows and macOS. The latest version of Ms Word is 2019.

How to open MS Word?

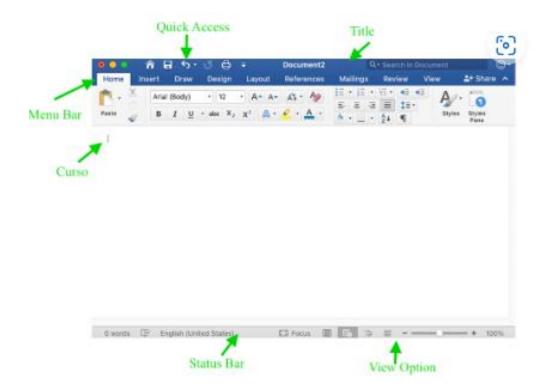
The following step shows how to open MS words:

Step 1: Type Ms Word in the search bar.

Step 2: Select Ms Word application

Step 3: Select a blank document and press create button.

Then you will get a window like in the image below where you can write your content and perform different types of operations on that content, like font type, style, bold, italic, etc. You can also add images, tables, charts to your document.

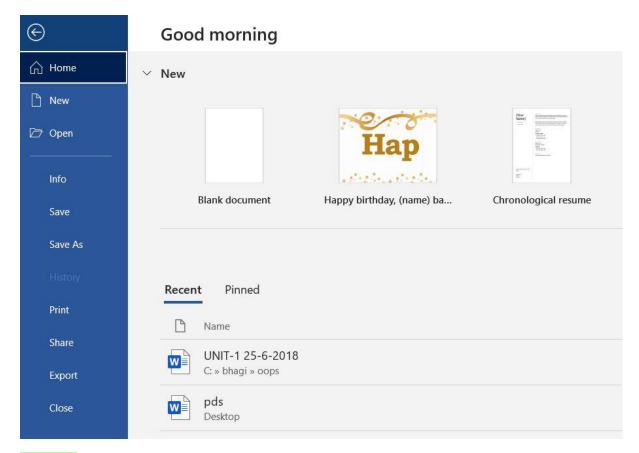


Features of MS Word

Now let us discuss the features or components of the Ms Word. Using these features, you can perform different types of operations on your documents, like you can create, delete, style, modify, or view the content of your document.

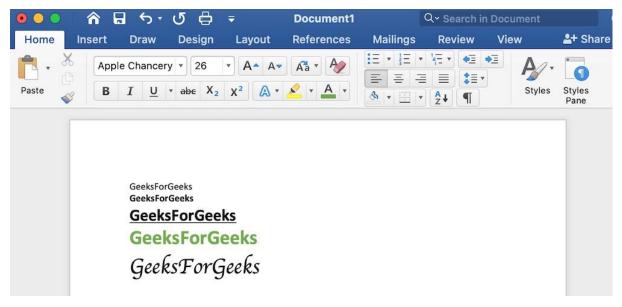
1. File

It contains options related to the file, like New(used to create a new document), Open(used to open an existing document), Save(used to save document), Save As(used to save documents), History, Print, Share, Export, Info, etc.



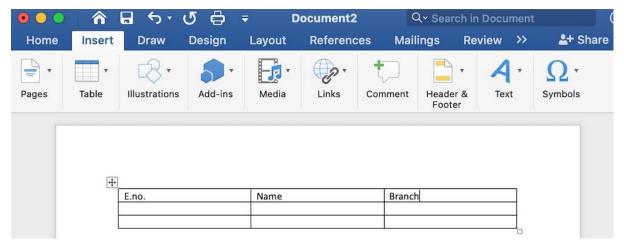
2. Home

It is the default tab of Ms Word and it is generally divided into five groups, i.e., Clipboard, Font, Paragraph, Style and Editing. It allows you to select the color, font, emphasis, bullets, position of your text. It also contains options like cut, copy, and paste. After selecting the home tab you will get below options:



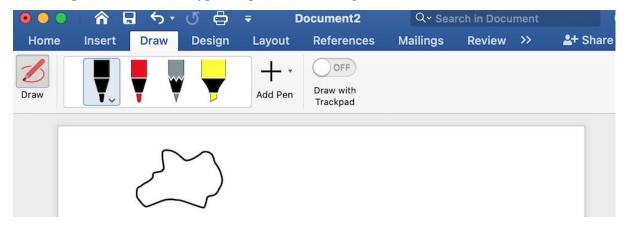
3. Insert

It is the second tab present on the menu bar or ribbon. It contains various items that you may want to insert into a Microsoft word. It includes options like tables, word art, hyperlinks, symbols, charts, signature line, date and time, shapes, header, footer, text boxes, links, boxes, equations, etc., as shown in the below image:



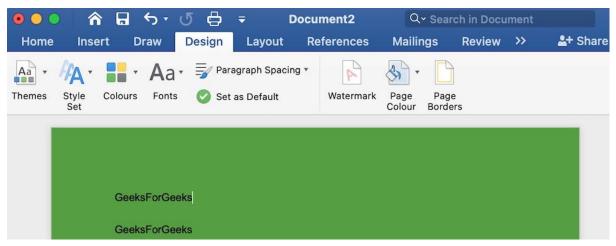
4. Draw

It is the third tab present in the menu bar or ribbon. It is used for freehand drawing in Ms Word. It provides different types of pens for drawing as shown below:



5. Design

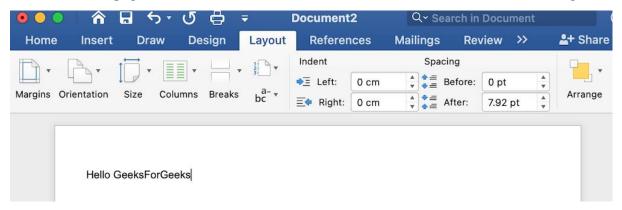
It is the fourth tab present in the menu bar or ribbon. The design tab contains document designs that you can select, such as documents with centered titles, offset headings, left-justified text, page borders, watermarks, page color, etc., as shown in the below image:



6. Layout

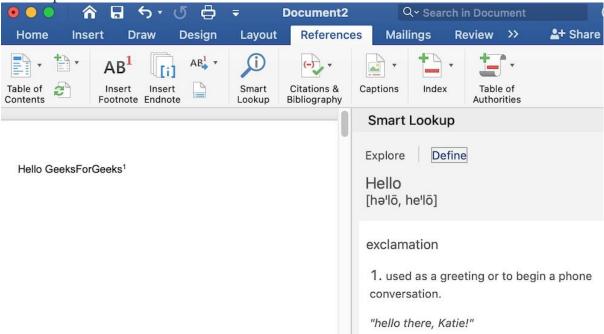
It is the fifth tab present on the menu bar or ribbon. It holds all the options that allow you to arrange your Microsoft Word document pages just the way you want them. It includes

options like set margins, display line numbers, set paragraph indentation, and lines apply themes, control page orientation and size, line breaks, etc., as shown in the below image:



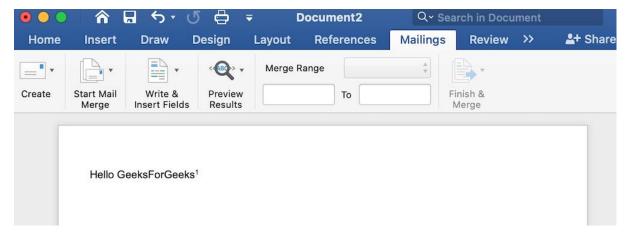
7. References

It is the sixth tab present in the menu bar or ribbon. The references tab lets you add references to a document, then create a bibliography at the end of the text. The references are generally stored in a master list, which is used to add references to further documents. It includes options like, Table of Contents, Footnotes, Citations & Bibliography, Captions, Index, Table of Authorities, smart look, etc. After selecting References tab, you will get the below options:



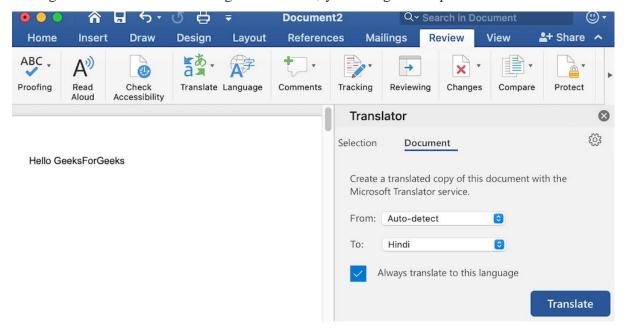
8. Mailings

It is the seventh tab present in the menu bar or ribbon. It is a least used tab in the menu bar. This tab is where you would create labels, print them on envelopes, do mail merge, etc. After selecting mailing, you will get the below options:



9. Review

It is the eighth tab present in the menu bar or ribbon. The review tab contains, commenting, language, translation, spell check, word count tools. It is good for quickly locating and editing comments. After selecting a review tab, you will get the options below:



10. View

It is the ninth tab present in the menu bar or ribbon. View tab allows you to switch between single page or double page and also allows you to control the layout tools It includes print layout, outline, web layout, task pane, toolbars, ruler, header and footer, footnotes, full-screen view, zoom, etc. as shown in the below image:



Hello GeeksForGeeks

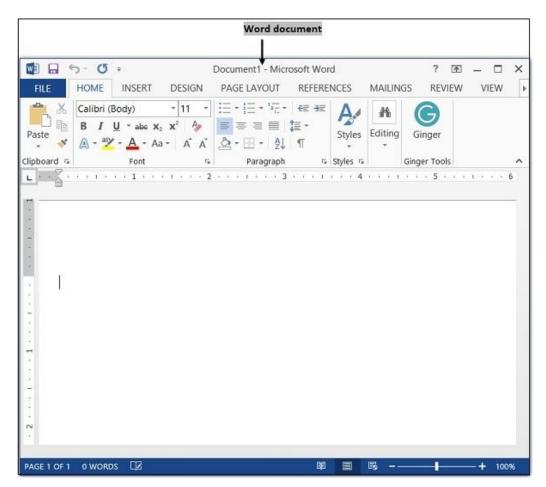
Elements of word Processing and Working Objectives

Microsoft Word is a popular word processing software. It helps in arranging written text in a proper format and giving it a systematic look. This formatted look facilitates easier reading. It provides spell-check options, formatting functions like cut-copy-paste, and spots grammatical errors on a real-time basis. It also helps in saving and storing documents.

It's also used to add images, preview the complete text before printing it; organize the data into lists and then summarize, compare and present the data graphically. It allows the header and footer to display descriptive information, and to produce personalized letters through mail. This software is used to create, format and edit any document. It allows us to share the resources such as clip arts, drawing tools, etc. available to all office programs.

Basics of Word Processing

Word processor is used to manipulate text documents. It is an application program that creates web pages, letters, and reports.



Sr.No. Word Processing Concepts & Description

Opening Word Processing Package

Word processing package is mostly used in offices on microcomputers. To open a new document, click on "Start" button and go to "All Programs" and click on "Microsoft Word".

Opening and Closing Documents

Word automatically starts with a blank page. For opening a new file, click on "New".

Page Setup

Page setup options are usually available in "Page Layout" menu. Parameters defined by the user help in determining how a printed page will appear.

Print Preview

This option is used to view the page or make adjustments before any document gets printed.

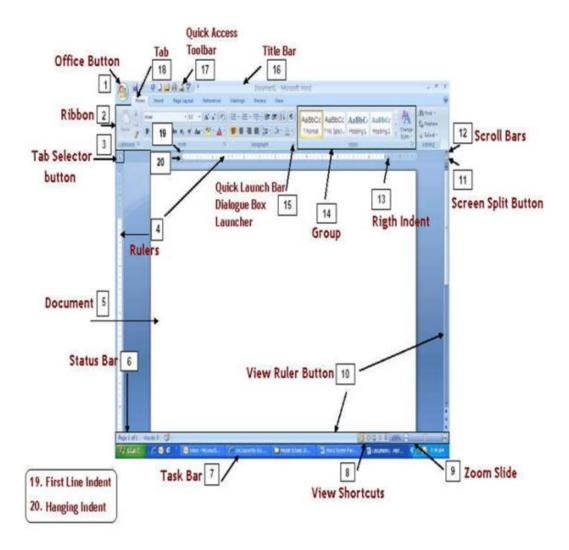
Cut, Copy and Paste

In this section, we shall learn how to use cut, copy and paste functions in Word.

Table Manipulation

Manipulation of table includes drawing a table, changing cell width and height, alignment of text in the cell, deletion/insertion of rows and columns, and borders and shading.

MSWord Screen and its Components



MS- Word Window Elements:

Various window elements of MS- Word

- Title bar
- Menu Bar
- Toolbars
- Workspace
- Status Bar
- Scroll Bars
- Scroll Box
- Task Pane

Exploring the Word Interface

Components of the Word Window

Besides the usual PC window components (close box, title bar, scroll bars, etc.), a Word window has other elements

Component	Functionality or Purpose of the Component
Menu Bar	Contains File, Edit, View, Insert, Format, Tools, Table, Window and Help menus
Standard Toolbar	Contains icons for shortcuts to menu commands.
Formatting Tool	Contains pop-up menus for style, font, and font size; icons for boldface, italic, and underline;
Bar	alignment icons; number and bullet list icons; indention icons, the border icon, highlight, and font color icons.
Ruler	Ruler on which you can set tabs, paragraph alignment, and other formats.
Insertion Point	Blinking vertical bar that indicates where text you type will be inserted. Don't confuse the insertion point with the mouse I-beam. To move the insertion point, just click the mouse where you want the point moved.
End-of-File Marker	Non-printing symbol that marks the end of the file. You cannot insert text after this mark.
Selection Bar	Invisible narrow strip along the left edge of the window. Your mouse pointer changes to a right-
(Gutter)	pointing arrow when it is in this area. It is used to select a line, a paragraph, or the entire document.
Split Handle	Double-click to split the window in two (to view different portions of the same file). Double-click to return to one window
Status Bar	Displays page number, section number, and total number of pages, pointer position on page and time of day.
Task Pane	Displays and groups commonly used features for convenience.
Office Assistant	An animated character that can provide help and suggestions. There are multiple characters to choose from, and it is possible to turn the Office Assistant off.

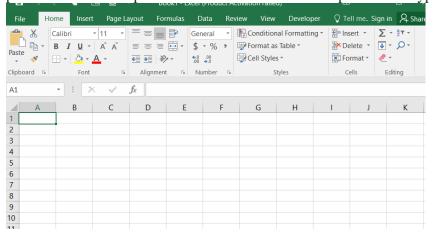
Introduction to MS-Excel:

MS-EXCEL is a part of Microsoft Office suite software. It is an electronic spreadsheet with numerous rows and columns, used for organizing data, graphically representing data(s), and performing different calculations. It consists of 1048576 rows and 16384 columns, a row

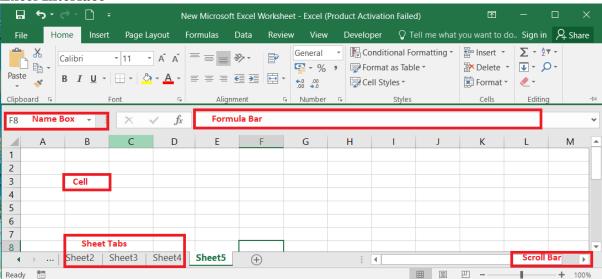
and column together make a cell. Each cell has an address defined by column name and row number example A1, D2, etc. This is also known as a cell reference.

What is MS Excel

Microsoft Excel is a software application designed for creating tables to input and organize data. It provides a user-friendly way to analyze and work with data. The image below provides a visual representation of what an Excel spreadsheet typically appears like



Excel Interface



What is a Cell

A spreadsheet takes the shape of a table, consisting of rows and columns. A cell is created at the intersection point where rows and columns meet, forming a rectangular box. Here's an image illustrating what a cell looks like:



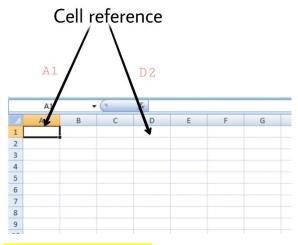
What is Cell Address or Cell Reference

The address or name of a cell or a range of cells is known as Cell reference. It helps the software to identify the cell from where the data/value is to be used in the formula. We can reference the cell of other worksheets and also of other programs.

- Referencing the cell of other worksheets is known as External referencing.
- Referencing the cell of other programs is known as Remote referencing.

There are three types of cell references in Excel:

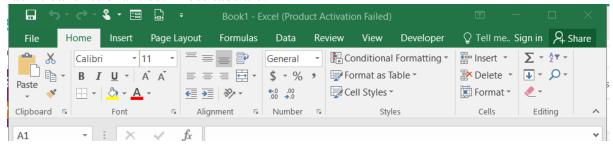
- 1. Relative reference.
- 2. Absolute reference.
- 3. Mixed reference.



Features of MS Excel

Ribbon

Th eRibbon in MS-Excel is the topmost row of tabs that provide the user with different facilities/functionalities. These tabs are:



Home Tab

It provides the basic facilities like changing the font, size of text, editing the cells in the spreadsheet, autosum, etc.

Insert Tab

It provides the facilities like inserting tables, pivot tables, images, clip art, charts, links, etc.

Page layout

It provides all the facilities related to the spreadsheet-like margins, orientation, height, width, background etc. The worksheet appearance will be the same in the hard copy as well.

Formulas

It is a package of different in-built formulas/functions which can be used by user just by selecting the cell or range of cells for values.

Data

The Data Tab helps to perform different operations on a vast set of data like analysis through what-if analysis tools and many other data analysis tools, removing duplicate data, transpose the row and column, etc. It also helps to access data(s) from different sources as well, such as from Ms-Access, from web, etc.

Review

This tab provides the facility of thesaurus, checking spellings, translating the text, and helps to protect and share the worksheet and workbook.

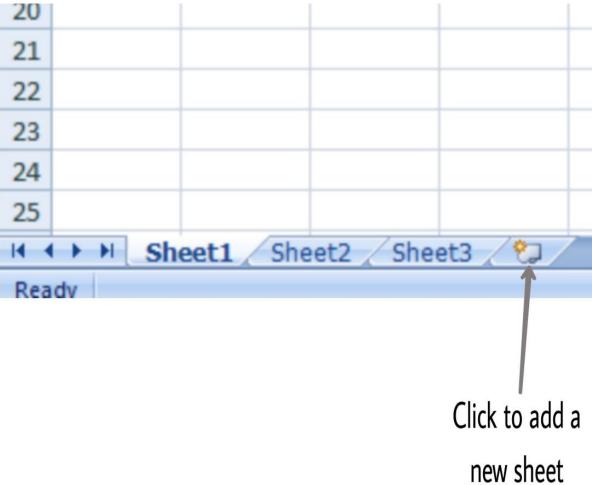
View

It contains the commands to manage the view of the workbook, show/hide ruler, gridlines, etc, freezing panes, and adding macros.

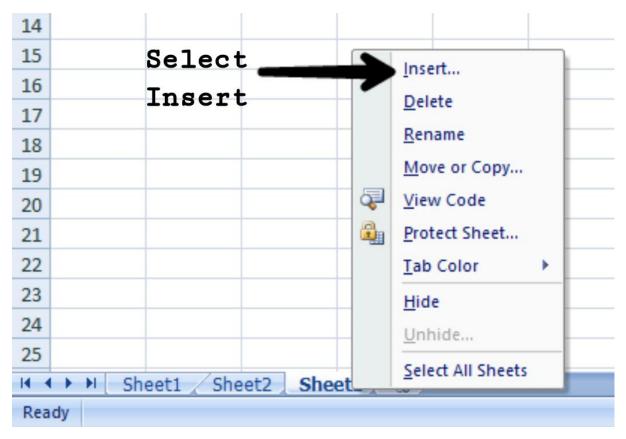
How to Create a New Spreadsheet

In Excel 3 sheets are already opened by default, now to add a new sheet:

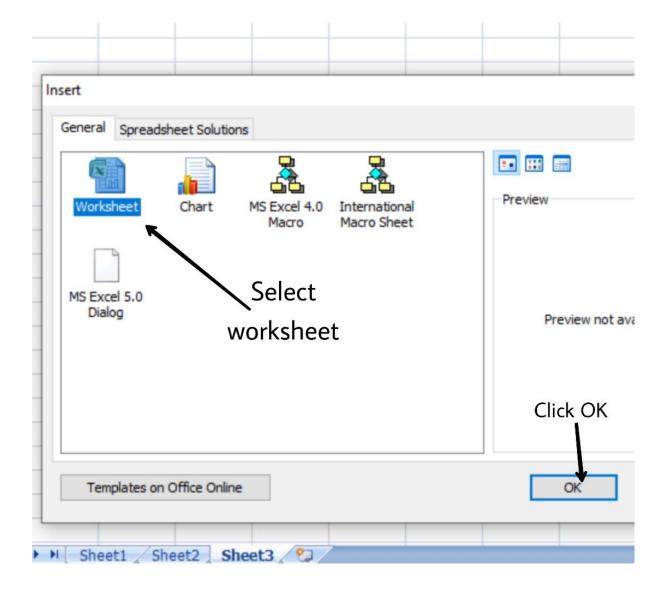
- In the lowermost pane in Excel, you can find a button.
- Click on that button to add a new sheet.



- We can also achieve the same by Right-clicking on the sheet number before which you want to insert the sheet.
- Click on Insert.



- Select Worksheet.
- Click OK.



How to Open an Existing Worksheet

On the lowermost pane in Excel, you can find the name of the current sheet you have opened.

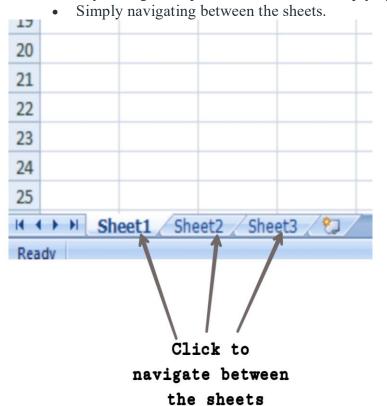
On the left side of this sheet, the name of previous sheets are also available like Sheet 2, Sheet 3 will be available at the left of sheet4, click on the number/name of the sheet you want to open and the sheet will open in the same workbook.

For example, we are on Sheet 4, and we want to open Sheet 2 then simply just click on Sheet 2 to open it.



Managing the Spreadsheets

You can easily manage the spreadsheets in Excel simply by :



How to Save the Workbook

- 1. Click on the Office Button or the File tab.
- 2. Click on Save As option.
- 3. Write the desired name of your file.
- 4. Click OK.

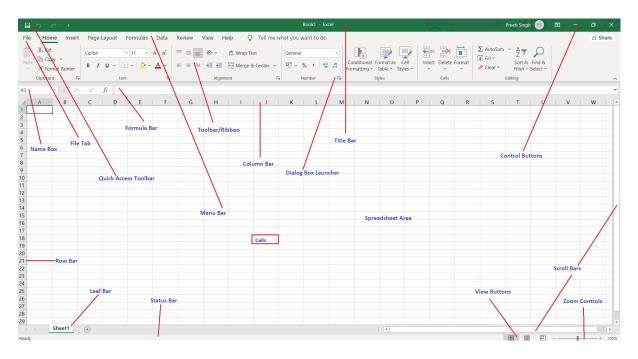
Ms-Excel shortcuts

- 1. **Ctrl+N:** To open a new workbook.
- 2. **Ctrl+O:** To open a saved workbook.
- 3. **Ctrl+S:** To save a workbook.
- 4. **Ctrl+C:** To copy the selected cells.
- 5. Ctrl+V: To paste the copied cells.
- 6. **Ctrl+X:** To cut the selected cells.
- 7. **Ctrl+W:** To close the workbook.
- 8. **Delete:** To remove all the contents from the cell.
- 9. **Ctrl+P:** To print the workbook.
- 10. Ctrl+Z: To undo.

MS-Excel Screen and Its Components:

Basic Parts of Microsoft Excel Window

Some parts of the Excel window (such as Ribbon and scroll bars) are standard in most other Microsoft programs. However, other features are more specific to spreadsheets, like the formula bar, worksheet tabs, and name box.



The following are the basic parts of the Microsoft Excel Window:

1. Quick Access Toolbar

- 2. File Tab
- 3. Title Bar
- 4. Control Buttons
- 5. Menu Bar
- 6. Ribbon/Toolbar
- 7. Dialog Box Launcher
- 8. Name Box
- 9. Formula Bar
- 10. Scroll Bars
- 11. Spreadsheet Area
- 12. Leaf Bar
- 13. Column Bar
- 14. Row Bar Cells
- 15. Cells
- 16. Status Bar
- 17. View Buttons
- 18. Zoom control

1. Quick Access Toolbar

This toolbar is located in the upper left corner of the screen. Its objective is to show the most frequently used Excel commands. We can customize this toolbar based on our preferred commands.

2. File Tab

Excel 2007's Office button has been replaced by the File tab. We can click it to **check the Backstage view**, where we can **open** or **save files, create new sheets, print sheets**, and perform other **file-related operations**.

3. Title Bar

The title bar of the spreadsheet is at the top of the window. It displays the **active document's name.**

4. Control Buttons

Control buttons are the symbols that are present in the **upper-right side** of the window, enabling us to change the **labels, minimize, maximize, share,** and **close the sheet.**

5. Menu Bar

Under the **diskette** or **save icon** or the **excel icon** (this will depend on the version of the program), **labels** or **bars** which enable changing the sheet which is shown. These are the menu bar and contain a **File, Insert, Page Layout, Formulas, Data, Review, View, Help,** and a **Search Bar** with a **light bulb** icon. These menus are divided into subcategories which simplify the distribution of information and analysis of calculations.

6. Ribbon/Toolbar

Each menu bar contains several different elements. On the selection of the menu, a sequence of command **options/icons** will show on a ribbon. For example, if we select the **"Home"** tab, we will see **cut**, **copy**, **paste**, **bold**, **italic**, **underline**, and **more** commands. In the same way; we can click on the **"Insert"** tab, we will see **tables**, **illustrations**, **additional**, **recommended graphics**, **graphics maps**, among others. On the other hand, if we select the **"Formulas"** option. **Insert functions**, **auto sum recently used**, **finances**, **logic**, **text**, **time**, **date**, etc.

Ribbon/Toolbar is a set of commands organized into three sections.

Tabs

They are the Ribbon's top part, and they include groups of related commands. Ribbon tabs include Home, Insert, Page Layout, Formula, Data.

Groups

They organize related commands; the name of each group is displayed below the Ribbon. For example, a set of commands related to fonts or a group of commands related to alignment, etc.

Commands

They appear within each group, as previously stated.

7. Dialog Box Launcher

Dialog box launcher is a very little down arrow that is present in the **lower-right** corner of a command group on the Ribbon. By clicking on this arrow, we can explore more options related to the concerned group.

8. Name box

Show the location of the active cell, row, or column. We have the option of selecting multiple options.

9. Formula Bar

Formula bar permits us to observe, insert or edit the information/formula entered in the active cell.

10. Scrollbars

Scrollbars are the tools that enable us to **move the document's vertical** and **horizontal** views. We can activate this by clicking on the platform's internal bar or the arrows we have on the sides. Additionally, we can use the **mouse wheel** in order to automatically scroll up or down: or use the directional keys.

11. Spreadsheet Area

It is the place where we enter our data. It includes all the **rows, cells, columns**, and **built-in data** in the spreadsheet. We can use shortcuts to perform toolbar activities or formulas of **arithmetic operations (add, subtract, multiply, etc.)**. The insertion point is the blinking vertical bar known as the "**cursor.**" It specifies the insertion location of the typing.

12. Leaf Bar

Leaf bar is present at the bottom of the spreadsheet, which says **sheet1** is shown. This sheet bar describes the spreadsheet which is currently being worked on. Using this, we can alternate a number of sheets or add a new one as per our convenience.

13. Columns Bar

Columns are a vertically ordered series of boxes across the full sheet. This column bar is located below the formula bar. The letters of the alphabet are used to label the columns. Begin with the letter A to Z, and then after Z, it will continue as AA, AB, and so on. The number of columns that can be used is limited to 16,384.

14. Rows Bar

The row bar is the left part of the sheet where a sequence of numbers is expressed. Begin with number one (1), and further rows will be added as we move the pointer down. There are a total of **1,048,576** rows available.

15. Cells

Cells are those parallelepipeds that divide the spreadsheet into many pieces, separating rows and columns. A spreadsheet's first cell is represented by the first letter of the alphabet and the number one (A1).

16. Status Bar

The status bar is present at the bottom of the window that displays critical information. It also indicates whether something is incorrect or whether the document is ready to be printed or delivered.

This shows the result of the selected digits such as sum, average, count, maximum, minimum, etc.

By **right-clicking** on the **status bar**, we can configure the **status bar**. Any command from the specified list can be added or removed.

17. View Buttons

View buttons are a set of three buttons arranged at the left of the Zoom control, close the screen's right-bottom corner. We can see three different kinds of sheet views in Excel using this method.

- o **Normal View:** Normal view displays the Excel page in normal view.
- Page Layout View: The Page Layout view shows the precise layout of an Excel page it will be printed.
- o Page Break View: This displays page break preview before printing.

18. Zoom Control

The zoom control is present at the **lower-right** side of the window. It enables us to **ZOOM-IN** or **ZOOM-OUT** a specific area of the spreadsheet. It is represented by magnifying icons with the symbols of **maximizing** (+) or **minimizing** (-).

.

Manipulation of cells,:

Introduction to MS-PowerPoint:

Information can be displayed using an electronic presentation application. This information is usually presented as a slide show — the data is displayed on a slide that may be viewed on a computer monitor or projected onto a screen using an LCD projector. A presentation might consist of multiple slides that are exhibited one after the other. The presentation tool in MS Office is MS PowerPoint. Microsoft PowerPoint is a popular presentation application, although there are alternatives such as Corel Presentations OpenOffice.org, Impress, etc.

How to open MS PowerPoint

In Windows 7:

Step 1: Go to the program section in the windows start menu.

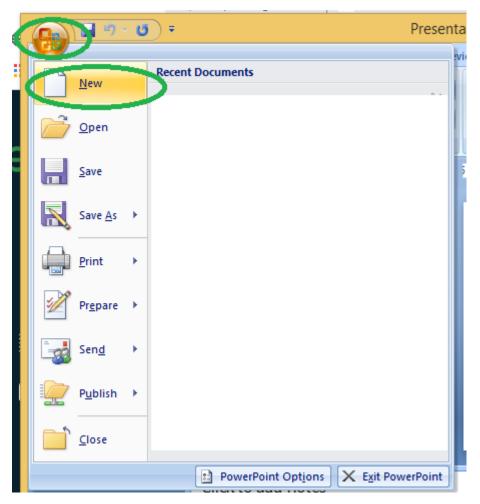
Step 2: Go to MS Office & click on it. A drop-down list is seen

Step 3: Click on MS PowerPoint & MS PowerPoint window will pop up.

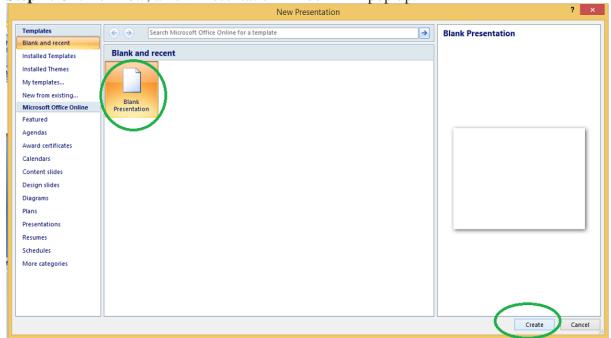
Creating a Presentation

Once your MS PowerPoint Window pops up, you can create & save the file by:

Step 1: Click on the **Microsoft** button on the top left.



Step 2: Click on new, a new Presentation window will pop up.



Step 3: Click on Create & a new presentation will be created.

Note: Shortcut for New: Ctrl +n

Saving a Presentation

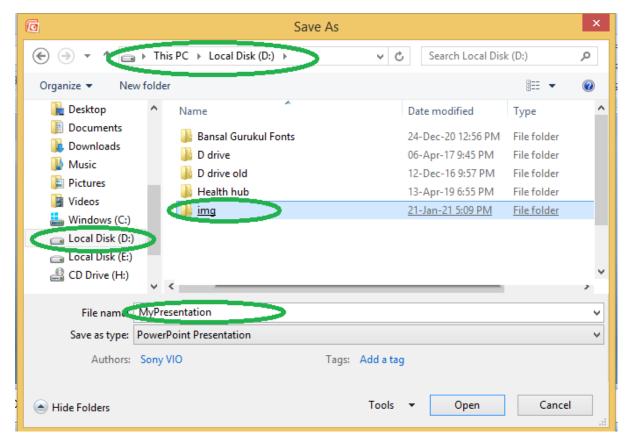
Once you have created a presentation, it can be easily saved with the help of following steps:

Step 1: Click on the Microsoft icon

Step 2: Click on the Save button



Step 3: A new Window for Save As will pop up.



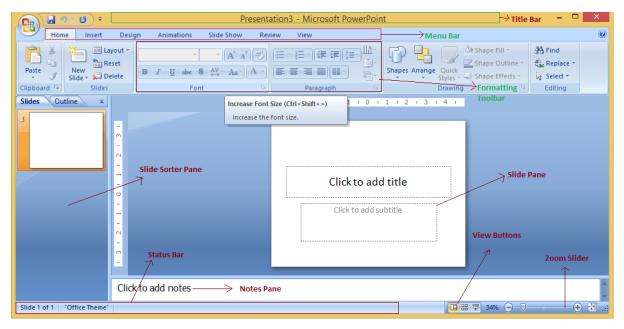
Step 4: Select the drive (by clicking on it: Example: Local Drive (D)) in which you want to save the presentation. Then your drive will open up, select the folder in which you want to save the presentation (Example: img folder here) & then give the required name to your presentation (Example: MyPresentation here). Your presentation is created & saved with the provided name.

Note: Shortcut for save: Ctrl + s

Basic Elements or components of a PowerPoint Window/Slide

You can see various bars in the presentation window. They are:

- (i) Title Bar: This shows the name/title given by you to the current presentation. If user do not save the presentation by any name, default name given by MS PowerPoint appears in this bar.
- (ii) Menu Bar: Contains menu items like insert, views, design, animations, etc.
- (iii) Office Button: MS Office button on the left-most top.
- **(iv) Formatting Toolbar:** Have tools like Bold, Italic, Underline, Font shape & size etc. to format your data.



- (v) **Zoom Slider:** To zoom in or zoom out your presentation.
- (vi) Slide Sorter Pane: This allows us to choose which slides will be shown in which sequence during the slide show.
- (vii) Notes Pane: This allows us to type notes that we may require later when preparing for the presentation, but they will not be displayed during the slide show.
- (viii) View Buttons: Provides different views of your presentation like: normal, slide show & slide sorter.
- (ix) Slide Pane: This is where we type, format, and otherwise design the slide. Concept of Slide Shows

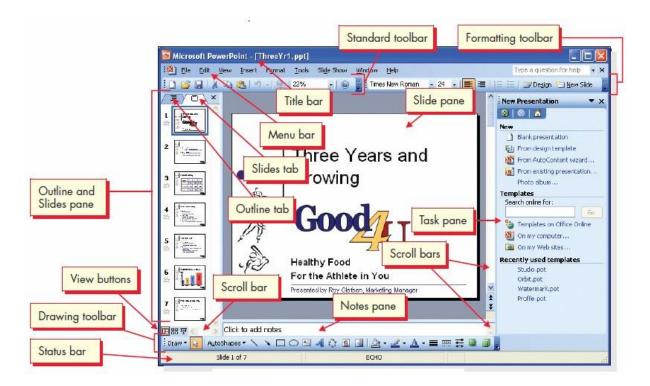
After preparing the presentation, it's time for the slide show. Steps for slide show are:

Step 1. Click on the view Option on the top Menu Toolbar

Step 2. Click on the slide show option.



Step 3. The slide show will start (Press Esc key (escape) to come out of slide show) *Note: Shortcut for the slide show is: F5*



Moving in a presentation

PowerPoint provides several ways to move from slide to slide in a presentation as

- Use the mouse to drag the scroll box.
- Use the mouse to click the Previous slide or Next slide buttons.
- Use the [Page {Up] and [Page {Down] keys on the keyboard

Features of PowerPoint,:

Features of PowerPoint Presentation (PPT)

PowerPoint provides a number of features and customisable options to enhance the visual appeal and performance of presentations. Some of these are as follows:

- **1. Slide Creation:** PowerPoint helps create slides that act as individual pages that contain pictures, texts, tables, charts, graphics, etc. attached to our presentations. This helps users create a meaningful and systematic presentation for our work.
- **2. Templates and Themes:** PowerPoint contains pre-designed templates and themes that can be used to enhance the visual appeal of your presentation. PowerPoint offers a number of themes and templates. These well-created themes and templates improve the slides' and presentation's attractiveness and give them a professional look.
- **3. Transitions and Animations:** PPT helps in creation of visual effects between presentations by using animations and transitions. These transitions can be simple or elaborate and can engage the audience and create smooth transitions between slides.
- **4. Multimedia Integration:** PowerPoint can help the users to insert images videos audio and animations in the slides to create an engaging and dynamic presentation.
- **5.** Collaboration and Sharing: PowerPoint offers collaboration features that allow multiple users to work on a presentation simultaneously. Poerpoint presentations with others through

email, cloud storage, or collaboration platforms, making it easy to collaborate and distribute work.

6. Speaker Notes: Speaker notes can be added by presenters for use as a reference during the presentation. These notes can be hidden from the audience and can be utilised by the users to give reminders additional details or signals while giving the presentation.

Basic tasks for creating a PowerPoint presentation

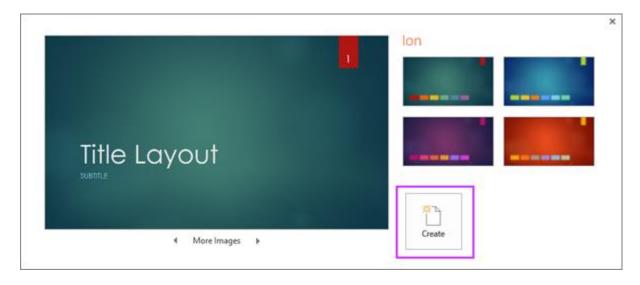
Choose a theme

When you open PowerPoint, you'll see some built-in themes and <u>templates</u>. A theme is a slide design that contains matching colors, fonts, and special effects like shadows, reflections, and more.

1. On the **File** tab of the Ribbon, select **New**, and then choose a theme.

PowerPoint shows you a preview of the theme, with four color variations to choose from on the right side.

2. Click **Create**, or pick a color variation and then click **Create**.



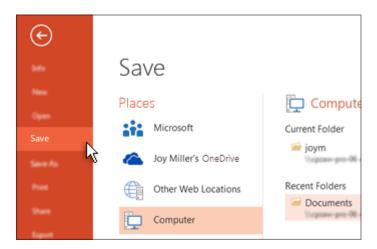
Insert a new slide

• On the **Home** tab, click the bottom half of **New Slide**, and pick a slide layout.



Save your presentation

- 1. On the **File** tab, choose **Save**.
- 2. Pick or browse to a folder.
- 3. In the **File name** box, type a name for your presentation, and then choose **Save**.



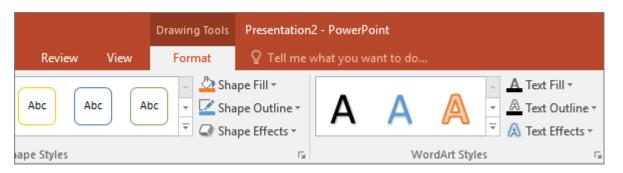
Add text

Select a text placeholder, and begin typing.



Format your text

- 1. Select the text.
- 2. Under **Drawing Tools**, choose **Format**.

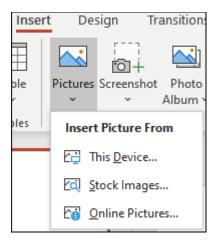


- 3. Do one of the following:
 - To change the color of your text, choose **Text Fill**, and then choose a color.
 - To change the outline color of your text, choose **Text Outline**, and then choose a color.
 - To apply a shadow, reflection, glow, bevel, 3-D rotation, a transform, choose **Text Effects**, and then choose the effect you want.

Add pictures

On the **Insert** tab, select **Pictures**, then do one of the following:

- To insert a picture that is saved on your local drive or an internal server, choose **This Device**, browse for the picture, and then choose **Insert**.
- (For Microsoft 365 subscribers) To insert a picture from our library, choose **Stock Images**, browse for a picture, select it and choose **Insert**.
- To insert a picture from the web, choose **Online Pictures**, and use the search box to find a picture. Choose a picture, and then click **Insert**.



Add shapes

You can add shapes to illustrate your slide.

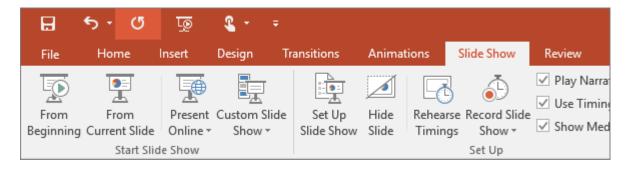
- 1. On the **Insert** tab, select **Shapes**, and then select a shape from the menu that appears.
- 2. In the slide area, click and drag to draw the shape.
- 3. Select the **Format** or **Shape Format** tab on the ribbon. Open the **Shape Styles** gallery to quickly add a color and style (including shading) to the selected shape.



Give your presentation

On the **Slide Show** tab, do one of the following:

• To start the presentation at the first slide, in the **Start Slide Show** group, click **From Beginning**.



- If you're not at the first slide and want to start from where you are, click From Current Slide.
- If you need to present to people who are not where you are, click **Present** Online to set up a presentation on the web, and then choose one of the following options:

or

Basic tasks for creating a PowerPoint presentation

• Choose a theme When you open PowerPoint, you'll see some built-in themes and templates. ...

- Insert a new slide On the Home tab, click the bottom half of New Slide, and pick a slide layout. ...
- Save your presentation On the File tab, choose Save. ...
- Add text Select a text placeholder, and begin typing.
- Format your text Select the text. ...