

TO ACQUAINT THE CLASS ABOUT MICROSOFT OFFICE SUITE 2021 & ADV FEATURES

Microsoft Office 2021 is an applications, a version of the Microsoft Office suite for the Microsoft Windows and mac operating systems. It is the successor to Office 2019 and was released on 05 Oct 2021.

In Office 2021, user find new co-authoring features, inking tools, data types, functions, translation, editing tools, Motion graphics, ease-of-use features, Recording and new Draw tab additions such as Point Eraser, Ruler, and Lasso.

- ✓ **WORD:-** MS Word is a word processor developed by Microsoft. It has advanced features which allow you to format and edit your files and documents in the best possible way.
- ✓ **POWERPOINT:-** MS PowerPoint is a program that is included in the Microsoft Office suite. It is used to make presentations for personal and professional purposes.
- ✓ **EXCEL:-** Excel is a spreadsheet program from Microsoft and a component of its Office product group for business applications. Microsoft Excel enables users to format, organize and calculate data in a spreadsheet.
- ✓ **OUTLOOK:-** Microsoft Outlook is a personal information manager software system from Microsoft, available as a part of the Microsoft Office suite. Though primarily an email client, Outlook also includes such functions as calendaring, task managing, contact managing, note-taking, journal logging and web browsing.
- ✓ **ONEDRIVE:-** OneDrive is the Microsoft cloud service that connects you to all your files. It lets you store and protect your files, share them with others, and get to them from anywhere on all your devices.

TO ACQUAINT THE CLASS ABOUT ADV FEATURES OF MICROSOFT OFFICE 2021

- ✓ **Co-Author Documents:-** With real-time co-authoring, User can work with others in the same document at the same time. There's no need to send extra notes or emails because everyone will be notified when a file is updated.
- ✓ **New & Improved Record Slide Show:-** Record Slide Show now supports presenter video recording, ink recording and laser pointer recording.

- ✓ **Ink replay - slide animation for ink object:-** Now User can apply the new Replay or Rewind animation to ink and get the drawing effect directly in your presentations. User can adjust the timing of these animations to be faster or slower to match the experience you want.
- ✓ **Reduce eye strain with dark mode:-** Previously, User could use Word with a dark ribbon and toolbars, but User document color stayed bright white. Now, Dark Mode in Word offers a dark canvas as well.
- ✓ **Updated draw tab:-** Quickly access and change the color of all your inking tools in one place. Simplify how User work with ink using new Draw tab additions: Point Eraser, Ruler, and Lasso.

- ✓ **MS OFFICE 97**
- ✓ **MS OFFICE 2000**
- ✓ **MS OFFICE XP**
- ✓ **MS OFFICE 2003**
- ✓ **MS OFFICE 2007**
- ✓ **MS OFFICE 2010**
- ✓ **MS OFFICE 2013**
- ✓ **MS OFFICE 2016**
- ✓ **MS OFFICE 2019**
- ✓ **MS OFFICE 365 (Online)**
- ✓ **MS OFFICE 2021 (LATEST)**

Min system reqmts of different MS Office Suite:-

OFFICE SUIT	PROCESSOR	RAM	ROM	OS
Office 2003	233 MHZ	128 MB	CD/DVD ROM	Win 7/ XP/VISTA
Office 2007	500 MHZ	256 MB	CD/DVD ROM	Win 7/ XP/VISTA
Office 2010	500 MHZ	256 MB	DVD ROM	Win 7/ XP/VISTA

Office 2013	1 GHZ	3 GB	DVD ROM	Win 7/ 8/ Win Server 2008 R2/ Win Server 2012
Office 2016	1 GHZ x86 or x64bit Processor	3 GB	DVD ROM	Win10/8/ Win Server 2012
Office 2019	1.6 GHz or faster, 2-core Processor.	4 GB RAM for 64-bit 2 GB RAM for 32-bit.	DVD ROM	Win10/ Win Server 2019.
Office 365/ 2021	1.6 GHz or faster, 2-core Processor.	4 GB RAM for 64-bit 2 GB RAM for 32-bit.	DVD ROM	Win10/ 8.1, Windows Server 2019/ 2016

New features of Office 2021:-

- ✓ **WORD:-** Word 2021 added co-authoring, automatic cloud saving, dark mode, an updated draw tab, and support for ODF 1.3 (Open Document Format).
- ✓ **MICROSOFT EXCEL:-**
 - XLOOKUP search for finding information in tables and ranges.
 - Dynamic array functions, including FILTER, SORT, SORTBY, UNIQUE, SEQUENCE, and RANDARRAY
 - LET function that assigns names to calculation results
 - XMATCH function that searches for a specified item and then provides the item's relative position
- ✓ **MICROSOFT POWERPOINT**
 - Record Slide Show now features options for presenter video recording, ink recording and laser pointer recording
 - User can replay ink strokes to illustrate things step by step or visualize a thought process
 - User can see slide elements in screen-reading order and rearrange them as necessary

✓ **MICROSOFT OUTLOOK**

- Email translation for over 70 different languages will be supported
- Instant Search feature allows you to quickly find specific emails

✓ **MICROSOFT ACCESS**

- Updated Linked Table Manager with refresh, relink, or remove options
- Addition of SQL DateTime2 data type
- Tab manager that allows you to see active tabs, rearrange tabs, or close database objects

What is Visio?

Microsoft Visio is software for drawing a variety of diagrams. These include flowcharts, org charts, building plans, floor plans, data flow diagrams, process flow diagrams, business process modeling, swim lane diagrams, 3D maps, and many more.

It's a Microsoft product, sold as an addition to MS Office. Visio 2016, the latest version, comes in three editions: Visio Standard, Visio Professional, and Visio Pro for Office 365.

- **New AWS stencils and shapes :-** It have enabled infrastructure shapes from another major cloud provider Amazon Web Services (AWS). User can now use stencils with the latest AWS shapes to help you create diagrams.

Trditional Editions of Office Suite 2021:-

- ✓ **OFFICE HOME & STUDENT** Office Home and Student 2021 is for students and families who want classic Office apps including Word, Excel, and PowerPoint for Windows 11 and Windows 10. A one-time purchase installed on 1 PC or Mac for use at home or school.

- ✓ **OFFICE HOME & BUSINESS** One-time purchase for 1 PC or Mac, Classic 2021 versions of Word, Excel, PowerPoint, and Outlook, Microsoft support included for first 60 days at no extra cost Compatible with Windows 11, Windows 10, or macOS
- ✓ **PROFESSIONAL PLUS 2021** includes Access, Excel, OneNote, Outlook, PowerPoint, Publisher, Skype for Business, Teams, and Word. Access and Publisher aren't available for devices running macOS.
- ✓ **OFFICE LTSC (Long Term Servicing Channel) 2021**

Office LTSC 2021 is the latest version of Microsoft's productivity software that's available to organizations through a volume licensing agreement. Office LTSC 2021 is separate from Office that's available through Microsoft Office 365 plans includes Access, Excel, OneNote, Outlook, PowerPoint, Publisher, Skype for Business, Teams, and Word. Office LTSC 2021 includes the OneNote desktop app.

Other Editions of Office 365 Suite:-

- ✓ Microsoft 365 Personal
- ✓ Microsoft 365 Family
- ✓ Microsoft 365 Business Basic
- ✓ Microsoft 365 Business Standard
- ✓ Microsoft 365 Business Premium
- ✓ Microsoft 365 Apps for Business

TO ACQUAINT THE CLASS ABOUT THE ADVANTAGES, FEATURES OF WORDS PROCESSOR AND RELATED TERMS

- Dark Mode
- Immersive Reader
- Co-author Document
- New and improved comments
- New and improved Screen recorder using Window button + G

Adv Features:-

- ❑ **Co-authoring:** Collaborate seamlessly with real-time co-authoring. Work on the same document simultaneously with others, and receive notifications when the file is updated.
- ❑ **Visual Refresh:** Modernized Start experience and newly refreshed tabs in the ribbon. The clean, clear style includes monoline iconography, a neutral color palette, and softer window corners.
- ❑ **Save your changes as they happen:** Upload files to OneDrive, OneDrive for Business, or SharePoint Online to ensure all updates are saved automatically.

- ❑ **Dark Mode:** Reduce eye strain with Dark Mode. Now, Word offers a dark canvas, making your entire working environment easier on the eyes.
- ❑ **Immersive Reader:** It is a powerful accessibility tool designed to enhance reading and editing experience. Which incl Read Aloud, Highlight parts of speech & Syllables breakdown.
- ❑ **Stock Media:** Explore more rich media content in the Office Premium creative content collection. This includes a curated library of stock images, icons, and more.
- ❑ **Microsoft Search:** Quickly find what you need using the new Microsoft Search box at the top of your Office apps. Search for text, commands, help, and more.
- ❑ **Line Focus:** Improve comprehension by moving through a document line by line without distractions. Adjust the focus to display one, three, or five lines at a time.
- ❑ **Updated Draw Tab:** Access and change the color of your inking tools easily. The new Draw tab additions include Point Eraser, Ruler, and Lasso.
- ❑ **Support for OpenDocument Format (ODF) 1.3:** Word now includes support for ODF 1.3, which adds various new features.
- ❑ **Sketched Style Outline:** Give shapes in your presentations a casual, hand-drawn look with the Sketched style outline.

- ✓ **AUTO SAVE ONEDRIVE AND SHARE POINT ONLINE FILES BY DEFAULT:-** When AutoSave is on, OneDrive and SharePoint Online files are Automatically saved and you can see changes to take other real time. AutoSave is a new feature available in Word for Microsoft 2021 subscribers that saves Online User file automatically, every few seconds, as They work. AutoSave is enabled by default in Microsoft 2021 when a file is stored on OneDrive, OneDrive for Business, or SharePoint Online.

Auto Recover option:-

- ✓ Word automatically saves User documents to a temporary folder while User are working on them. If User forget to save User changes, or if word crashes, User can restore the file using auto recover
- ✓ By default, word auto-saves every 10 minutes. If User are editing a document for less than 10 minutes, word may not create an auto-saved version.

Co-author documents:-

- ✓ We and Other User can open and work on the same document. **This is called co-authoring.** When We co-author, We can see each other's changes quickly in a matter of seconds.
- ✓ Word 2021 makes it easy to share and collaborate on documents using Co-Authoring and OneDrive.
- ✓ In Co-Authoring User giving others User to access the exact same file and Share with edit the same document
- ✓ In order to share a document, it must first be saved to User OneDrive.

TO ACQUAINT THE CLASS ABOUT THE MICROSOFT WORD 2021

MAILING TAB

- ✓ **ENVELOPES:-** envelopes in Word are created through the use of styles that define specific elements of the envelope, such as return address and recipient address. User can modify the space allocated for these addresses by modifying the styles used by Word.
- ✓ **LABLES:-** Labels refer to the information or Address (in particular) get displayed on products, banners, etc. We can also set the quantity of the labels we want and can print them instantly.
- ✓ **START MERGE** A mail merge is a method of taking data from a database, spreadsheet, or other form of structured data, and inserting it into documents such as letters, mailing labels, and name tags.
 - ✓ Letter
 - ✓ E-Mail Messages
 - ✓ Envelopes
 - ✓ Labels

- ✓ Directory
- ✓ Normal Word Document
- ✓ Step by Step Mail Merge Wizard
- ✓ SELECT RECIPIENTS
- ✓ EDIT RECIPIENTS LIST

MAIL MERGE THROUGH STEP BY STEP MAIL MERGE WIZARD:-

STEP 1: Select Document

- Letter
 - E-Mail Messages
 - Envelopes
 - Labels
 - Directory

STEP 2: Select Starting Document

- Use the current Document
- Start from a template
- Start from Existing Document

STEP 3: Select Recipients

- Use an existing File
- Select from Outlook contacts
- Type a new list

STEP 4: Write your Letter

- Address Block
 - Greeting Line
 - Electronic Postages
 - More Items

STEP 5: Preview your Letter

STEP 6: Complete the Mail Merge

Imp Shortcut keys:-

Shortcut Keys	Description
Ctrl + A	Select all contents of the page
Ctrl + B	Bold highlighted selection.
Ctrl + C	Copy selected text.
Ctrl + D	Font
Ctrl + E	Aligns the line or selected text to the center of the screen.
Ctrl + F	Open find box.
Ctrl + G	Goto
Ctrl + H	Replace
Ctrl + I	Italic highlighted selection.
Ctrl + J	Justify
Ctrl + K	Insert Hyperlink

Shortcut Keys	Description
Ctrl + L	Aligns the line or selected text to the left of the screen
Ctrl + M	Indent the paragraph.
Ctrl + N	Open New Document
Ctrl + O	Open
Ctrl + P	Open the print window.
Ctrl + Q	removes all formatting from a highlighted paragraph.
Ctrl + R	Aligns the line or selected text to the Right of the screen
Ctrl + S	Save
Ctrl + U	Underline
Shortcut Keys	Description
Ctrl + V	Paste.
Ctrl + W	closes the current document
Ctrl + X	Open New Document
Ctrl + Y	Redo the last action performed.

Ctrl + Z	Undo last action.
Ctrl + Shift + F	Change the font.
Ctrl +]	Increase selected font +1pts.
Ctrl + [Decrease selected font -1pts.
Ctrl + Shift + <	Decrease selected font -1pts if 12pt or lower, if above 12 decreases font by +2pt.
Ctrl + Shift + >	Increase selected font +1pts up to 12pt and then increases font +2pts.
Shortcut Keys	Description
Ctrl + Shift + *	View or hide non printing characters.
Ctrl + <left Arrow>	Moves one word to the left.
Ctrl + <right arrow>	Moves one word to the right.
Ctrl + <up arrow>	Moves to the beginning of the line or paragraph.
Ctrl+ <down arrow>	Moves to the end of the paragraph.
Ctrl + Del	Deletes word to right of cursor.
Ctrl + Backspace	Deletes word to left of cursor.
Ctrl + End	Moves the cursor to the end of the document.
Ctrl + Home	Moves the cursor to the beginning of the document.
Ctrl + Spacebar	Reset highlighted text to the default font.
Shortcut Keys	Description
Ctrl + 1	Single-space lines.
Ctrl + 2	Double-space lines.
Ctrl + 5	1.5-line spacing.
Ctrl + Alt + 1	Changes text to heading 1.
Ctrl + Alt + 2	Changes text to heading 2.
Ctrl + Alt + 3	Changes text to heading 3.
Ctrl + F1	Open the Task Pane.
F1	Open Help.
Alt + Ctrl + F2	Open new document.

Ctrl + F2	Display the print preview.
Shift + F3	Change the text in MS from upper to lower case or a capital letter at the beginning of every word.
Shortcut Keys	Description
Shift + Insert	Paste.
F4	Repeat the last action performed (Word 2000+)
F5	Open the find, replace, and go to window in Microsoft Word.
Ctrl + Shift + F6	Opens to another open MS Word document.
F7	Spell and grammar check selected text and/or document.
Shift + F7	Runs a Thesaurus check on the word highlighted.
F12	Save as.
Shift + F12	Save.
Ctrl + Shift + F12	Prints the document.
Shortcut Keys	Description
Alt + Shift + D	Insert the current date.
Alt + Shift + T	Insert the current time.
Ctrl+Equal sign (=)	Subscript Shortcut
Ctrl+Shift+Plus sign (+)	Superscript Shortcut
Ctrl + Enter	Insert a page break at the insertion point
Mouse shortcuts	Description
Click, hold, and drag	Selects text from where you click and hold to the point you drag and let go.
Double- Click	If double-click a word, selects the complete word.
Triple- Click	Selects the line or paragraph of the text the mouse triple-clicked
Ctrl + Mouse wheel	Zooms in and out of document.

TO ACQUINT THE CLASS ABOUT ADV FEATURES
OF MS POWER POINT 2021

➤ **Co-authoring:-**

- ✓ Collaborate seamlessly with colleagues on the same PowerPoint presentation
- ✓ Co-authoring allows real-time updates, ensuring you see changes within seconds

➤ **Better Collaboration with Modern Comments:-**

- ✓ Control when you send comments to co-authors
- ✓ Enjoy a consistent commenting experience across presentations and other Office apps

➤ **Know Who's in Your Presentation:-**

- ✓ Easily see who else is working on the same document and their location within it

➤ **Visual Refresh:-**

- ✓ Experience a modernized Start menu and refreshed ribbon tabs
- ✓ Monoline iconography, neutral color palette, and softer window corners create a clean and clear style

➤ **New and Improved Record Slide Show:-**

- ✓ Record Slide Show now supports presenter video recording, ink recording, and laser pointer recording
- ✓ Use Record, Pause, and Resume buttons for precise narration and navigation recording

➤ **Stock Media Enhancements:-**

- ✓ Access more rich media content from the Office Premium Creative Content collection
- ✓ Curated stock images, icons, and other assets help express ideas effectively

➤ **Replay Your Ink Strokes:-**

- ✓ Apply the new Replay or Rewind animation to ink drawings directly
- ✓ Adjust the timing for desired effects

➤ **Find What You Need with Microsoft Search:-**

- ✓ The new Microsoft Search box at the top of Office apps helps to quickly locate text, commands, and more

➤ **AutoSave:-**

- ✓ Upload files to OneDrive, OneDrive for Business, or SharePoint Online
- ✓ Ensure all updates are saved automatically

Other Formats:-

- ✓ **Visme.** Visme is an online tool for creating, editing, sharing, and storing visual materials. User can use it as a presentation app to make slide decks, but User can also create templates for infographics, charts, logos, storyboards, graphics for social media posts and the web, letterheads, and other items.
- ✓ **Prezi.** The main difference between Prezi and PowerPoint is that Prezi is a cloud-based tool for creating non-linear presentations while PowerPoint is an offline tool for creating standard presentations.

- ✓ **Zoho Show.** Zoho Show is an online presentation software that lets users create, edit, share, collaborate, and deliver presentations from anywhere.
- ✓ **Keynote.** Keynote is a presentation software application developed as a part of the iWork productivity suite by Apple Inc. Version 10 of Keynote for Mac, the latest major update, was released in March 2020. On January 27, 2010, Apple announced a new version of Keynote for iPad with an all-new touch interface.
- ✓ **Slidebean.** A pitch deck presentation also known as a startup pitch deck or slide deck is a visual document that provides investors with essential information about your business plan, product or services, fundraising needs, and key metrics like valuation, target market, and financial goals.
- ✓ **Google Slides.** Google Slides is an online presentation app that lets you create and format presentations and work with other people.

Zoom:-

- ✓ **SUMMARY ZOOM** A summary zoom is like a landing page where User can see the pieces of your presentation all at once. When its presenting, User can use the zoom to go from one place in your presentation to another.
- ✓ **SECTION ZOOM** A section zoom is a link to a section already in your presentation. User can use them to go back to sections want to really emphasize, or to highlight how certain pieces of presentation connect.
- ✓ **SLIDE ZOOM** A slide zoom can help make presentation more dynamic, allowing to navigate freely between slides in any order choose without interrupting the flow of presentation.

Media:-

- ✓ **VIDEO** PowerPoint allows to insert a video onto a slide and play it during your presentation. This is a great way to make your presentation more engaging for your audience. You can even edit the video within PowerPoint and customize its appearance.

- ✓ **AUDIO** Add and record audio, such as music, narration, or sound bites, to your PowerPoint presentation and select the playback options.
- ✓ **SCREEN RECORDING** You can record your computer screen and related audio, and then embed it in your PowerPoint slide or you can save it as a separate file.

Record:-

- ✓ **RECORD SLIDE SHOW** New features added to the Record window
- **RECORD FROM CURRENT SLIDE**
- **RECORD FROM BEGINNING**

RECORD FROM CURRENT SLIDE PowerPoint for Microsoft 2021 automatically records the time you spend on each slide, including any Animate text or objects steps that occur, and the use of any triggers on each slide. If you use the pen, highlighter, or eraser, PowerPoint records those actions for playback also.

RECORD FROM BEGINNING Open the slide you want to start recording from. the PowerPoint Recording Tab, select Record From Beginning. When you're ready, select the round ,Lift Corner of Windows Click red Record button, wait for the countdown, then start speaking. To record from a specific slide, go to it, and then select Record.

SCREENSHOT Sometimes referred to as a screencap or screengrab, is an image that shows the contents of a computer display. Screenshots let you capture exactly what you're seeing on your screen to share with others or reference later. Taking, saving, and sharing screenshots can be extremely helpful.

SCREEN RECORDING PowerPoint makes it easy to create and embed a screen recording (often called a screencast) inside of a presentation, which you may find useful when explaining something you've seen on your display. You also get the options to add voice-over narration and/or your pointer arrow, which can add further direction.

Go to the Recording tab, click on Screenshot and choose Screen Clipping. PowerPoint will switch to your screenshot and fade it. To select the clipping you want, just drag a new window over the bit of the screenshot you want to add. This screen clipping will then be added to the active slide in your presentation.

Imp Shortcut Keys:-

Shortcut Keys	Description
Ctrl + A	Select all contents of the page
Ctrl + B	Bold highlighted selection.
Ctrl + C	Copy selected text.
Ctrl + D	Paste Content
Ctrl + E	Aligns the line or selected text to the center of the screen.
Ctrl + F	Open find box.
Ctrl + G	Individual objects will become a single group of objects that you can easily move around yours slides.
Ctrl + H	Replace
Ctrl + I	Italic highlighted selection.
Ctrl + J	Justify
Ctrl + K	Insert Hyperlink
Ctrl + L	Aligns the line or selected text to the left of the screen
Ctrl + M	New Slide
Ctrl + N	Open New PPT
Ctrl + O	Open
Ctrl + P	Open the print window.
Ctrl + Q	Close PPT
Ctrl + R	Aligns the line or selected text to the Right of the screen
Ctrl + S	Save
Ctrl + U	Underline
Ctrl + V	Paste.
Ctrl + W	Closes the current Presentation
Ctrl + X	Open New Document
Ctrl + Y	Redo the last action performed.
Ctrl + Z	Undo last action.
Ctrl + F4	Close
F10	Menu bar
Entry End	Move to the end of the
Ctrl + F6	Next window

Shift + F4	Repeat Find
F5	Begin the slide show
B	Black screen show/hide
Esc	End
H	Hidden slide
Ctrl-L	Hide pointer and button always
Ctrl-H	Hide pointer and button temporarily
Ctrl-A	Mouse pointer to arrow
Ctrl-P	Mouse pointer to pen
N	Next slide
P	Previous slide
T	Set new timings while rehearsing
S	Stop/restart automatic slide show
M	Use mouse-click to advance (rehearsing)
O	Use original timings (rehearsing)
W	White screen show/hide
F7	Spelling and Grammar check
Ctrl-F6	Switch to the next presentation window
Ctrl-Tab / Ctrl-Page Down	Switch to the next tab in a dialog box
Ctrl-Shift-F6	Switch to the previous presentation window
Ctrl-Shift-Tab / Ctrl-Page Up	Switch to the previous tab in a dialog box

ADV FEATURES OF MICROSOFT EXCEL 2021

- It helps in doing calculations
- It helps in making charts
- It helps in formatting
- Best way to store data
- You can perform calculations
- All the tools for data analysis
- Easy to data visualizations with charts
- You can print reports easily
- So many free templates to use
- You can code to automate
- Transform and clean data
- Store data with millions of rows
- You can work with Excel online + mobile app

New way to issue command:-

- This option add in Excel 2016 for the first time.
- In Excel 2021 LTSC (Long Term Service Channel) offers yet another way to issue command: Tell me what you want to do box.
- Situated in the UPPER PART of the ribbon tab
- Use this when you are unsure of where to find the command

Paste Special:-

All	Pastes all cell contents and formatting of the copied data.
Formulas	Pastes only the formulas of the copied data as entered in the formula bar.
Values	Pastes only the values of the copied data as displayed in the cells.

Formats	Pastes only cell formatting of the copied data.
Comments and Notes	Pastes only comments and notes attached to the copied cell.
Validation	Pastes data validation rules for the copied cells to the paste area.
All using Source theme	Pastes all cell contents in the document theme formatting that is applied to the copied data.
All except borders	Pastes all cell contents and formatting applied to the copied cell except borders.
Column widths	Pastes the width of one copied column or range of columns to another column or range of columns.
Formulas and number formats	Pastes only formulas and all number formatting options from the copied cells.
Values and number formats	Pastes only values and all number formatting options from the copied cells.
All merging conditional formats	Pastes the contents and conditional formatting options from the copied cells.
None	Specifies that no mathematical operation will be applied to the copied data.
Add	Adds the copied data to the data in the destination cell or range of cells.
Subtract	Subtracts the copied data from the data in the destination cell or range of cells.
Multiply	Multiplies the copied data with the data in the destination cell or range of cells.
Divide	Divides the copied data by the data in the destination cell or range of cells.
Skip blanks	Avoids replacing values in your paste area when blank cells occur in the copy area when you select this check box.
Transpose	Changes columns of copied data to rows and vice versa when you select this check box.
Paste Link	Click to create a link to the copied cell(s).

Conditional Formatting:-

- Conditional formatting formula provides the functionality to highlight cells with a certain color, depending on the cell's value or a specific condition.
- It is a fantastic way to quickly visualize data in an excel sheet. By conditional formatting rules in Excel, you can highlight data with provided criteria.

- Conditional formatting options allow you to apply different formatting options, such as background colour, borders, or font formatting to data that meets certain conditions.
- A cell can have up to 3 format conditions, each with its own formats, in addition to the default value of "no formatting". This allows you to have different formats depending on the value of the cell.

What Cell Formatting can be Changed:-

You can apply the following formats with your rules:-

- Number: apply different number formats
- Font: show a different font style, or font colour, or add a strikethrough effect, or underline
- Fill: change the cell fill colour and fill pattern
- Border: change the cell border colour and border style

What Cell Formatting Cannot Change

In Conditional formatting, you cannot apply formatting options that would affect:-

- The row height, OR
- The column width

For example, you cannot apply formatting to change any of the following:-

- Font family
- Font size
- Superscript
- Subscript
- Border thickness

Auto Fill:-

Fill series: The fill series command is a command in excel sheet which enables you to open the series dialog box. This dialog box then enables you to enter values into many cells with just a few clicks.

Linear: Creates a series that is calculated by adding the value in the step value box to each cell value in turn.

Growth: Creates a series that is calculated by multiplying the value in the step value box by each cell value in turn.

Date: Creates a series that fills date values incrementally by the value in the step value box and dependent on the unit specified under date unit.

Flash fill:-

- Flash Fill automatically fills your data when it senses a pattern
- For example, you can use Flash Fill to separate first and last names from a single column, or combine first and last names from two different columns
- Flash Fill is only available in Excel 2013 and later. Windows/ Mac OS

Pivot Table:-

- A pivot table is a tool in data summation that is common in many business software. It is utilized to collect the summary of a specific data set in a compressed technique.
- They let the user make a faster organization and drawing of conclusions from data being collected.
- Pivot table consists of columns, rows, pages, and data fields.
- These can be moved around and it assists in expanding, isolating, summarizing, and grouping the specific data. And all of these can be accomplished in real time.
- A pivot table is a special Excel tool that allows you to summarize and explore data interactively
- A pivot table allows you to extract the significance from a large, detailed data set.
- A Pivot Table is a tool which is used to store the summary of a large data set in a condensed manner.
- Pivot Table enables the user to view the differences in a very big set of information.

- It is very helpful in organizing a large amount of data in Microsoft Excel.

Advantages:-

- User-friendly
- Create instant data
- Data analysis easier
- Summarizes data easily
- Assists in finding data patterns
- Creates accurate reports faster
- Pivot tables can help in making decisions faster

Data Model:-

- The data model in Excel is a type of data table where two or more tables are in a relationship with each other through a common or more data series. In the data model, tables and data from various other sheets or sources come together to form a unique table that can access the data from all the tables.
 - For example, a data table containing tables of customers, product items, and product sellers. We can use the Excel data model to connect this dataset and create a relationship between them.
 - Relationships exist within a Data Model—one that you explicitly create, or one that Excel automatically creates on your behalf when you simultaneously import multiple tables. You can also use the Power Pivot add-in to create or manage the model. See Create a Data Model in Excel for details.
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- It allows integrating data from multiple tables by creating relationships based on a common column.
 - Data models are used transparently, providing tabular data that can be used in a Pivot Table in Excel and Pivot Charts in excel. In addition, it integrates the tables, enabling extensive analysis using pivot tables, power pivot, and Power View in Excel.
 - The data model allows loading data into Excel's memory.
 - It is saved in memory, where we cannot directly see it. Then We can instruct Excel to relate data to each other using a common column. The 'Model' part of the data model refers to how all tables relate.
 - The data model can access all the information it needs, even in multiple tables. After the data model is created, Excel has the data available in its memory. With the data in its memory, we can access the data in many ways.

- **ARRAY:** An array formula is a formula that can perform multiple calculations on one or more items in an array. You can think of an array as a row or column of values, or a combination of rows and columns of values. Array formulas can return either multiple results, or a single result.
- **LOOKUP ARRAY:** The array form of LOOKUP looks in the first row or column of an array for the specified value and returns a value from the same position in the last row or column of the array. Use this form of LOOKUP when the values that you want to match are in the first row or column of the array.
- **LOOKUP VALUE:** A value that LOOKUP searches for in an array. The lookup_value argument can be a number, text, a logical value, or a name or reference that refers to a value. If LOOKUP can't find the value of lookup_value, it uses the largest value in the array that is less than or equal to lookup_value.

Type of Functions:-

- **DATE & TIME FUNCTION.**
- **TEXT FUNCTION.**
- **LOGICAL FUNCTION.**
- **LOOKUP & REFERENCE**
- **MATH & TRIGONOMETRY**
- **MORE FUNCTION**
 - Statistical
 - Engineering
 - Cube
 - Information
 - Compatibility

Difference:-

<u>HLOOKUP</u>	<u>VLOOKUP</u>
It assumes that data is arranged as a table with different elements of the information in different rows.	Whereas it assumes that data is arranged as a table with different elements of the information in different columns.

It looks for a value horizontally across the lookup table.	It looks for a value vertically across the lookup table.
The use of HLookup function is less as compared to VLookup function.	The use of VLookup function is more than compared to HLookup function.
It is used when data is listed in rows.	Whereas it is used when data are listed in columns.
In HLookup function, the value the user is searching in the table or range must be in the top-most column.	In VLookup function, the value the user is searching must be located in the left-most column of the table or range.
HLookup function returns the searched value in the same column.	VLookup function returns the searched value in the same row but in the next column.
The H in the HLookup function stands for horizontal search	The V in VLookup function stands for Vertical search.
It is used to find out data from a range in the bottom-most range.	It helps to find out the data in the leftmost column.

Relative Cell Reference:-

- By default, all cell references are relative references. When copied across multiple cells, they change based on the relative position of rows and columns. For example, if you copy the formula =A1+B1 from row 1 to row 2, the formula will become =A2+B2. Relative references are especially convenient whenever you need to repeat the same calculation across multiple rows or columns.

Absolute Cell Reference:-

- There may be times when you do not want a cell reference to change when filling cells. Unlike relative references, absolute references do not change when copied or filled. You can use an absolute reference to keep a row and/or column constant.
- An absolute reference is designated in a formula by the addition of a dollar sign (\$) before the column and row. If it precedes the column or row (but not both), it's known as a mixed reference.

- When cell reference or a formula move to another cell/place, it always use the reference of the previous cell.
- We use absolute cell reference when we want to apply one value to desired cells.
- Example – COUNTIF formula.
- F4 used as a switcher in formula.

Method of Absolute cell reference:-

Sign before each part of reference	\$(dollar sign)
Short cut key for absolute	F4
<u>Switching between relative and absolute references</u>	
Press F4 1st time	Absolute both column and row reference
Press F4 2nd time	Absolute row reference only
Press F4 3rd time	Absolute column reference only
Press F4 4th time	Make relative ref

\$A\$1	1ST Time	Allows neither the column nor the row reference to change.
A\$1	2 Time	Allows the column reference to change, but not the row reference.
\$A1	3 Time	Allows the row reference to change, but not the column reference.
\$A\$1	Both the column and row reference are fixed. Neither will be incremented or changed during a copy or fill operation.	
\$A1	Only the column reference is fixed. It will not change during a fill or copy, but the row will change.	
A\$1	Only the row reference is fixed. It will not change during a fill or copy, but the column will change.	

KEYS FOR MOVING AND SCROLLING IN A WORKSHEET OR WORKBOOK:-

<u>PRESS</u>	<u>TO</u>
ARROW KEYS	Move one cell up, down, left or right
CTRL + ARROW KEY	Move to the end of the current sheet
HOME	Move to the beginning of the row
CTRL + HOME	Move to the beginning of the worksheet
F11	Create chart of current data on separate tab
CTRL+F10	Maximise or restore window
CTRL + END	Move to the last cell on the worksheet content
PAGE DOWN	Move down one screen
PAGE UP	Move up one screen
ALT + PAGE DOWN	Move one screen to the right
ALT + PAGE UP	Move one screen to the left
CTRL + PAGE DOWN	Move to the next sheet in the workbook
CTRL + PAGE UP	Move to the previous sheet in the workbook
CTRL+F6 OR CTRL+TAB	Move to the next workbook or window
F5	Display the go to dialog box
SHIFT+F5	Display the find dialog box
ENTER	Complete a cell entry and move down
ALT+ENTER	Start a new line in the same cell
TAB	Complete a cell entry and move to the right
SHIFT+TAB	Complete a cell entry and move to the left
ESC	Cancel a cell entry
CTRL + D	Fill down
CTRL + R	Fill to the right
SHIFT + F2	Edit a cell comments
F2	Edit the active cell

F7	Display the spelling dialog box
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KEYS FOR ENTERING/ EDITING DATA ON A WORKSHEET:-

<u>PRESS</u>	<u>TO</u>
CTRL + 1	Open format cell
CTRL + Q	Quick analysis
CTRL + 8	Create outline
CTRL + 9	Hide row
CTRL + 0	Hide column
CTRL + SHIFT+(Unhide row
CTRL + SHIFT+)	Unhide column
CTRL + -	Delete option
CTRL+SHIFT+:	Current time
CTRL+;	Current date
CTRL+ALT+V	Paste special
CTRL +SHIFT+ +	Insert dialogue box
CTRL + -	Delete dialogue box
CTRL + SHIFT +U	Switches between expanding and collapsing of the formula bar
CTRL + D	Copies the value from the cell above the active cell into the cell or the formula bar
SHIFT +TAB	Moves to the previous cell
SHIFT + SPACEBAR	Select entire row
CTRL + SPACEBAR	Select entire column
CTRL + SHIFT +L	Reapply the filter and sort
SHIFT+ F11	Insert sheet
CTRL +SHIFT+ 7	Apply outline border to cell
CTRL + SHIFT+_	Remove outline border from cell

ALT+=	Insert autosum formula
CTRL+SHIFT+P	Shows font tab of format cell
CTRL+L	Display create table option
CTRL+]	Select cells that contain formulas that directly reference the active cell
CTRL+E	Flash fill
CTRL+W	Close active sheet

Validation of Data:-

Excel Data Validation is a feature that restricts (validates) user input to a worksheet. Technically, you create a validation rule that controls what kind of data can be entered into a certain cell. Like-

- ❖ Allow only numeric or text values in a cell.
- ❖ Allow only numbers within a specified range.
- ❖ Allow data entries of a specific length.
- ❖ Restrict dates and times outside a given range.
- ❖ Restrict entries to a selection from a drop-down list.
- ❖ Validate an entry based on another cell.
- ❖ Show an input message when the user selects a cell.
- ❖ Show a warning message when incorrect data has been entered.
- ❖ Find incorrect entries in validated cells.

