

KEVIN STRATVERT

EXCEL 2021

Learn Excel Essentials Skill with Practical Exercises for Dummies



KEVIN STRATVERT

EXCEL **2021**

**Learn Excel Essentials Skill with Practical
Exercises for Dummies**



© KEVIN STRATVERT 2021

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the author.

Printed in United States of America

CONTENTS

Contents

Chapter 1

Introduction to Microsoft Excel

What is Microsoft Excel

How to get Microsoft Excel Application

Buying and installation of Office software

Where to buy Office Package which contains Excel

Getting Microsoft Excel for Free

Excel in Mobile phones

Importance of Microsoft Excel Application

Terms used in Microsoft Excel

What is the Difference between a Workbook and a Spreadsheet?

Chapter 2

Getting Started and the Basic Tools in Excel

Opening Excel Desktop Application as a User

Blank workbook Explained

How to Create Sheets in a Workbook

Understanding the Basic Tools in Excel Spreadsheet

Step by Step Guide in Making Text and Numbers Bold

How to Underline Text in Excel

Choosing Font Size

Steps on How to change Text Color in Excel

Steps in converting Excel Workbook Cells to Table

How to add Cells, Rows, Columns, and New sheet

How to Sort Items in Excel Workbook

Explanation on Ideas Command

Identifying the Undo and Redo Commands

The Basic Tabs in Excel

Customization

[How to Add or Remove Tabs \(Ribbons\) in Excel](#)

[Changing Language](#)

[Selecting a Cell](#)

[How to Select Cells](#)

Chapter 3

Managing Excel Workbook and Ribbons

[Editing in Workbook Cells](#)

[Sharing Your Excel Document with Share Tool](#)

[How to Share Excel Workbook File Using link](#)

Chapter 4

[Completing Tasks Through Tabs](#)

[Managing Spreadsheets](#)

[How to Remove Sheets in a Workbook](#)

[How to Rename Sheets in a Workbook](#)

[Understanding Review Tab](#)

[Proofreading in Excel](#)

[Spelling](#)

[Thesaurus](#)

[Workbook Statistics](#)

[Checking Best Practice Status in Excel](#)

[Check Accessibility](#)

[Definition and Search in Excel in Excel](#)

[Smart Lookup](#)

[Translate](#)

[Comments](#)

[Managing Notes in Cells](#)

[Steps in Adding Note in a Cell](#)

[Cells, Sheets and Workbook Protection](#)

[Sheet Protection](#)

[Protect Workbook](#)

[Allow Edit Ranges](#)

[Unshare Workbook](#)

[Hide Ink](#)

[Getting Help from Support and Training](#)

[Contacting Support](#)

[Show Training command](#)

[What's New](#)

[Chapter 5](#)

[Charts in Excel](#)

[What is a chart?](#)

[Bar Chart](#)

[How to create a Bar Chart](#)

[Exercise on Bar Chart](#)

[How to create Pie Chart](#)

[Exercise on Pie Chart](#)

[More Information on Inserted Charts in Workbook](#)

[Guide on Inserting Histogram Chart in a Workbook](#)

[How to Create Map Chart](#)

[Step by Step Guide on How to represent Information in a Map Chart](#)

[Scatter Chart](#)

[Guide on Potting of Scatter Chart](#)

[Radar Chart](#)

[Step by Step Guide in Creating Radar Chart in Excel](#)

[Waterfall Chart Explained](#)

[Step by Step Guide on How to plot Waterfall Chart](#)

[Chapter 6](#)

[Up and Running with Formulas](#)

[Understanding the Importance of Columns and Rows in Formulas](#)

[Using Basic Operators in Excel](#)

[Addition](#)

[Another Approach to Sum Numbers in Excel \(In-built Function\)](#)

[Subtraction](#)

[Multiplication](#)

[Division](#)

[Finding Average, Minimum and Maximum Values](#)

[Guide on Finding Average of Numbers in a Workbook](#)

[Finding Minimum Value](#)

[Finding Maximum Value](#)

[Using Functions](#)

[Function for Date](#)

[Count Function](#)

[Chapter 7](#)

[Working with Excel in Phones](#)

[Opening Excel App in Your Smart Phone](#)

[Creating Your First Excel Document Via Mobile Application](#)

[Entering Texts in Excel for Smart Phones](#)

[Making Text and Numbers Bold](#)

[Selecting Tabs in Excel for Smart Phones](#)

[How to Change Row and Column Size in Excel Mobile App](#)

[Inserting Picture in Workbook Using Excel Mobile App](#)

[Is it possible to create chart using Excel Mobile App?](#)

[Chart Insertion Using Excel Mobile Application](#)

[How to Create Bar Chart Using Excel Android App](#)

[How to Add Sheets in Workbook Using Excel Mobile Application](#)

[Sharing Excel File Through Mobile App](#)

[Saving Excel Document Through Mobile Application](#)

[Appreciation](#)

CHAPTER 1

Introduction to Microsoft Excel

Welcome to the book that will walk you through on the basics and detailed information you need to know on Excel. Microsoft Excel is used in completion of many tasks in offices, companies and by individuals. As an author, I also use this application frequently. It helps me organize my works and make them clean for future use. In this teaching, I will walk you through in step by step guide on how you can complete tasks properly on your own using this great app.

What is Microsoft Excel

Microsoft Excel is a powerful spreadsheet program created by Microsoft Corporation for data analysis and documentation. The application contains columns and rows, and each intersection of a column and a row forms what is called a **cell** . In addition to this information, Microsoft as a company was founded by Bill Gates and Paul Allen. I will explain some terms you will use to learn Excel application later in one of the subheadings you will read through.

HOW TO GET MICROSOFT EXCEL APPLICATION

Without having Microsoft Excel application in your computer or accessing it through any other means, there is no way you can have access to use this important application. I will walk you through on how to get this powerful spreadsheet application. You can get it through any of these ways:

1. Buying and installation of Office software
2. Getting Microsoft Excel for Free
3. Excel in Mobile phones

Buying and installation of Office software

Microsoft Office software contains all the basic software developed by Microsoft corporation. When you buy this software and install it in your computer, you can have access to many Microsoft products which among them is Excel. There are versions of Office which you can purchase from office.com website and from other retail shops which operate online as well as offline. Currently, Microsoft sells Office 2019 and 365 on their website. But more importantly, they promote Microsoft 365 (formally Office 365). So, if you do not have Office package installed in your computer currently, you can go for the 365 version which has many beautiful features added to it.

Where to buy Office Package which contains Excel

I want to inform you that **Microsoft Excel** or simply put **Excel** are just the same thing so that you do not get confused. There are some outlets through which you can buy and install office on your computer. These outlets are as follow:

1. Microsoft Office website which is accessible through www.microsoft.com and www.office.com websites

2. Amazon which is accessible through www.amazon.com
3. Indigo Software Company which is accessible through www.indigosoftwarecompany.com
4. Walmart which is accessible through www.walmart.com/
5. And many other physical computer software stores

When you visit www.microsoft.com for instance, Microsoft will recommend you buy Microsoft 365 package for your PC. The reason is because the software has many good new features added to the components that make up the package.

On the other hand, when you visit www.amazon.com , you will be landed on the homepage of the website. From the dropdown at the search box located at the top left-hand side of the site, select **Software** as your search option.

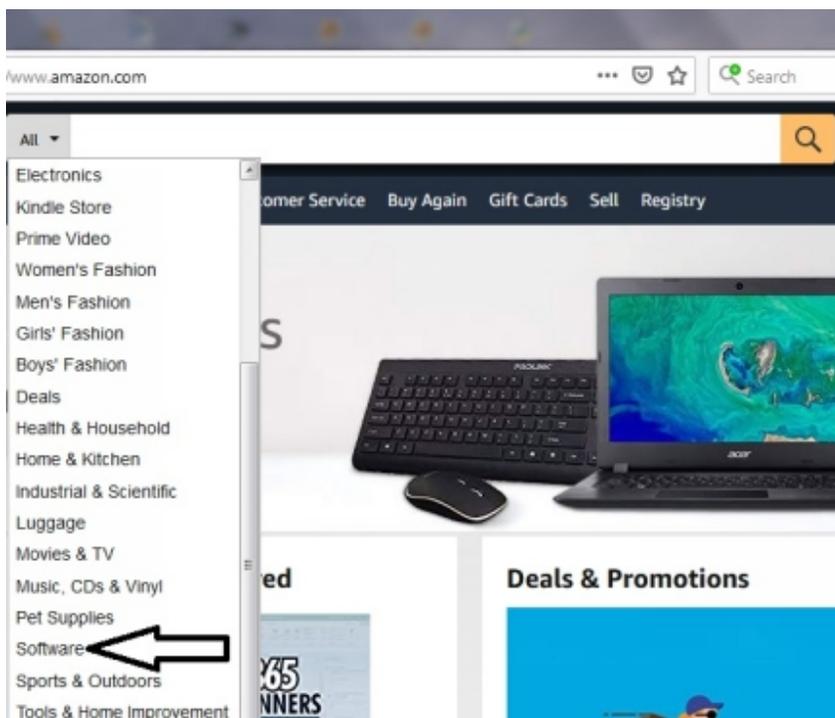


Fig 1: Select Software as shown by the arrow

When you visit the Indigo Software Company through the website www.indigosoftwarecompany.com , you are to use the search box to search for the version of Office you want to install in your computer. The company will guide you on the installation and activation steps.

Walmart still has different versions of Office software on their website just like Amazon. When you visit the site, you can use the search box to search for the version of the Office you want to buy, example “Office 2019”. This will show you the version if still available and you can pay, download, install and activate it.

You can visit any computer software seller shop close to you to also purchase any Office application of your choice. The seller will also put you through on how you can install and active the application package.

Getting Microsoft Excel for Free

This is a new development by Microsoft corporation. It allows you to have access to Microsoft Excel online without paying for the software but with limited tools. In fact, you are given access to use other Microsoft products for free including Microsoft Word, Outlook, Publisher, One Note OneDrive, Skype and others. But since our interest is on Excel, we will focus on it.

To have access to Excel for free, you are to take these steps:

1. With your computer well connected to internet, visit www.office.com preferably using your Chrome browser
2. When you land on the homepage of the site, you will be on the page that looks like the one below:



Office ▾

Remote Learning in education. Learn more >

Welcome to Office

Your place to create, communicate,
collaborate, and get great work done.

Sign in

Get Office

Sign up for the free version of Office >

Fig 1.1: The homepage of www.office.com

If you have account with Microsoft already, you can click **Sign in** and then sign in with your Microsoft signin details. But if you do not have account with Microsoft, just click **Sign up for the free version of Office** and start creating account with the company.

But if the **Sign up for the free version of Office** link is not shown on the homepage of the website when you visit it, just click Sign in, and select **sign up** when the link opens. When you click Sign up and the new page opens,

under the **Create Account** , just type in your email address. It can be your Gmail address, Yahoo, or any other.

A code will be sent to that email address you filled, and Microsoft system will open a box for you to fill in the code when you receive it in your email address. When you type in the code as you receive it in your email, the system may request for your phone number as well. Fill in your valid and active phone number if requested because verification code will be sent to it as well. You will be expected to fill in the code in the space that will be provided for you.

At the end of setting up your account with Microsoft, you will be logged in to the Office online platform. You will be shown a page that looks like the one below:

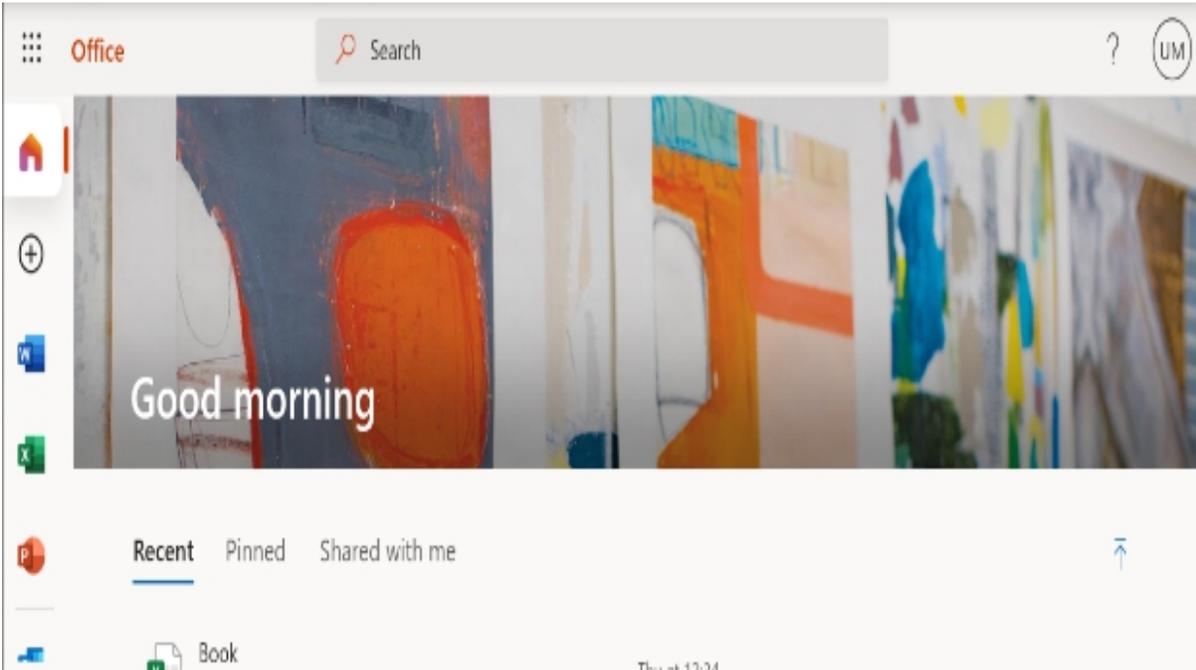


Fig 1.2: The free Office online homepage when logged in

As you are logged in, you can click Excel. When you click Excel, it will open, and you can then start entering your data in the cells. I will teach you more on the data entering as we go further.

Excel in Mobile phones

Another way through which you can have access to Excel is by downloading and installing the Excel application in your smartphone. Though Excel

application in smart phones has limited functionalities, you can still perform basic Excel tasks in it.

If you want to install Excel application in your Android phone, just visit the **Playstore** in your phone, in the search box, type **Microsoft Excel** , and then search. The Microsoft Excel app will show up as shown below:

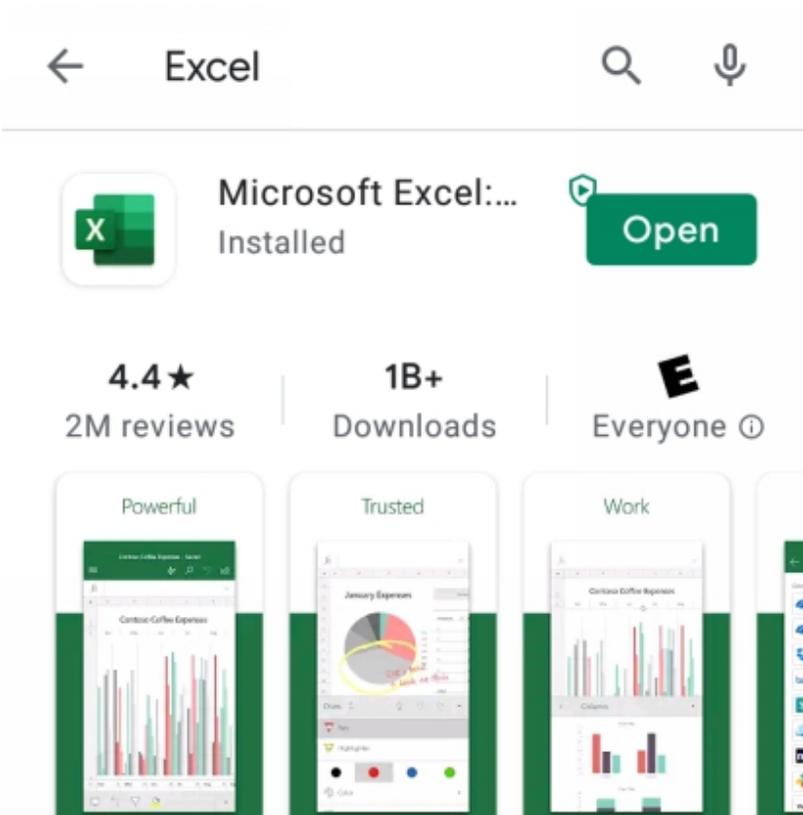


Fig 1.3: Excel App in Play store

Click the **Install** button for the app to be installed on your phone (though you can see **Open** in my picture because its already installed in the phone). Once the installation is over, you can start making use of the application.

On the other hand, if you make use of iPhone rather than Android device, you can still have Microsoft Excel app installed on it. What you are to do is to visit the App store of your iPhone. When you get there, search for Microsoft Excel using the search box, install and activate it in your device. I will walk you through on some tasks you can complete with the Microsoft Excel app on your phone in chapter 7.

IMPORTANCE OF MICROSOFT EXCEL APPLICATION

Microsoft Excel application is of great importance in our society today. It is because of its importance that makes it the most used spreadsheet application in our world today. In our day to day businesses, Excel plays very important role. One of its applications in business is in calculating large values. I am going to discuss its importance in detail.

Easy Arithmetic Solutions

Instead of using calculator to press some numbers before getting some answers which you are likely to make mistake while pressing the numbers using the calculator buttons, Excel makes it easy and gives you more accurate result. Imagine trying to add over 3000 values with calculator for instance; you are likely to make mistake as you go on. But with Excel, you can just highlight the entire values, select the **Sum** operator under the **Formulas** tab, and you are given the answer automatically. Excel is a great program.

The Ease to Access Excel Files Online

This is another importance of Excel application. You do not need to be close to your employees physically before you can be able to share your Excel files with them. With the collaboration property available in Excel, you can share your created spreadsheet files with anyone. They can have access to the files remotely online.

Nice Formatting Tools

Excel as an application was developed with nice formatting tools. You can give your spreadsheet containing data “clean” formatting. You can decide to give the data in different rows different colors to differentiate between them.

There are many tools in Excel that you can use to format your data and make them great.

Ability to Compose Large data

Excel spreadsheet is made of many cells that can accept large number of data. The spreadsheet is so big to the extent that it can take the information of workers in a standard company in United States and that of workers in other specific companies. An Excel worksheet contains 1,048,576 rows by 16,384 columns.

Detailed Analysis Using Charts

Microsoft Excel has different types of charts integrated inside of it. These charts make it possible for you to analyze data without any much stress. Some businesses use these charts to explain the inflow and outflow of money in the company, and for other purposes.

TERMS USED IN MICROSOFT EXCEL

There are some terms in Excel which I want you to know about. Knowing about these terms will make your learning easy. It will save you the time of making extra research to find the meaning of some keywords you may not understand.

Button

A button simply implies an icon you can click on in Excel to complete specific task. Different buttons are used for different task completion. Buttons include bold, underline, text align, and others. In Excel program, button can be called **command or tool** . Buttons are just those designs in any application which you can click to get any specific job done.

Workbook

The term workbook means a collection of cells organized in rows and columns. It is that working surface you will interact with when you start making use of your Excel application. It is that spreadsheet where you enter texts and numbers. A workbook can contain many spreadsheets inside of it.

Spreadsheet

The word spreadsheet means a working environment in Excel where you can enter your data in different cells. A spreadsheet is also called worksheet or sheet.

What is the Difference between a Workbook and a Spreadsheet?

A spreadsheet is just an Excel program that is made of cells with tools to perform tasks and a workbook is still an Excel program but can have many spreadsheets inside of it. A workbook is like an exercise book that is made up of many leaves. The leaves as I use here are the sheets. Spreadsheet is just single but workbook can go plural by containing many sheets. And it can also contain just one spreadsheet.

Copy, Cut, and Paste

In many Microsoft application products, copy, cut and paste are commonly used words. In Microsoft Word for instance, they are common actions taken by users. I will like to explain the terms for you. When you select text or right-click any cell in Excel, you will be shown cut, copy and paste among other options.

If you click **cut**, the text or number will be deleted from the cell and you can paste it in another cell in the spreadsheet. When you select **copy**, the text or number will be copied in the computer clipboard and remains in the cell, and you can paste it in another cell.

To paste implies to place the current content of your computer clipboard (the copied text or number) in another cell of the spreadsheet.

Row

Row is a common term in Mathematics study. I started hearing of it right from my primary school days. In Excel, a row is the horizontal section of the spreadsheet containing many cells. It is made up of cells arranged horizontally. Rows in Excel are numbered.

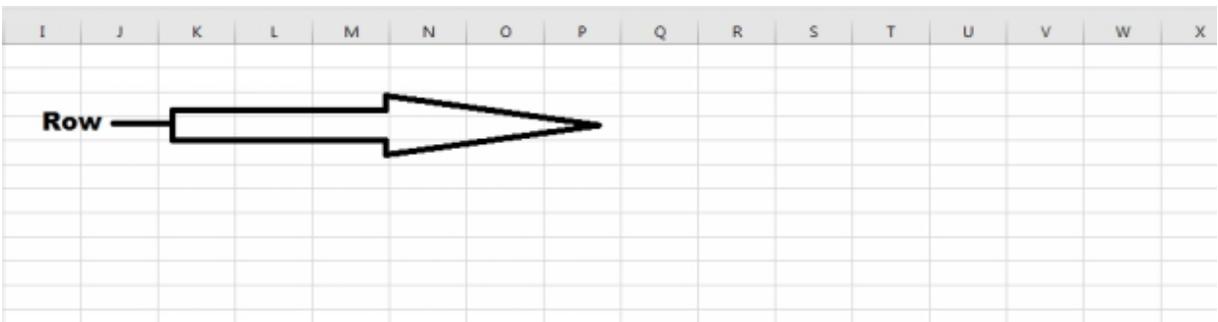


Fig 1.4: The direction of row shown

Column

Just like row, column was a common term to me in my primary school days especially in Statistics. A column is the vertical line of cells of Excel spreadsheet. It involves cells arranged in vertical order. Columns are labelled in letters.

Cell

A cell is the building block of Excel program. It is a location at the intersection of a particular row and column. Depending on the size an Excel

user chooses for cells, they can be rectangular or square in shape. Without cells, there is nothing like Excel application. They are where values including texts are entered in the spreadsheet.

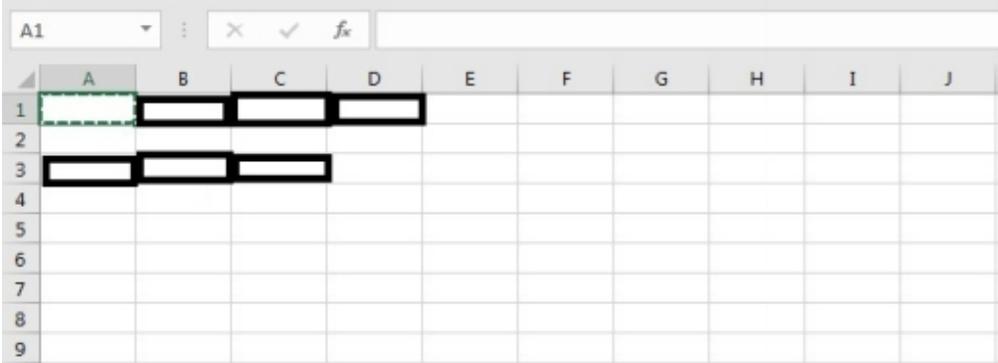


Fig 1.5: Picture indicates some cells in rectangular shape

Data

In this book, I will be using the term **data** frequently to make my teaching. In this teaching, data are texts, numbers, or even icons. When I say prepare your data anywhere in this teaching, I mean you should prepare your information in Excel sheet which you will use to create chart or complete a particular task.

CHAPTER 2

Getting Started and the Basic Tools in Excel

If you do not know how to start anything of value in life, it becomes a big problem as you are likely not to know the way to end it. Because it is fundamental to know how to start Excel application, I will take my time to teach you that. It is something basic you need to know if you have not started already.

On the other hand, there are some basic tools you cannot do without in Excel spreadsheet application. You cannot work in Excel without interacting with these tools. They are the basic tools you need to know about before advancing to other tools. Most of the tools are in the **Home** tab of Excel. I will explain these tools with simple grammar for your proper understanding.

OPENING EXCEL DESKTOP APPLICATION AS A USER

As a first-time user of Excel, the screenshot below will resemble what you will see when you open the application:

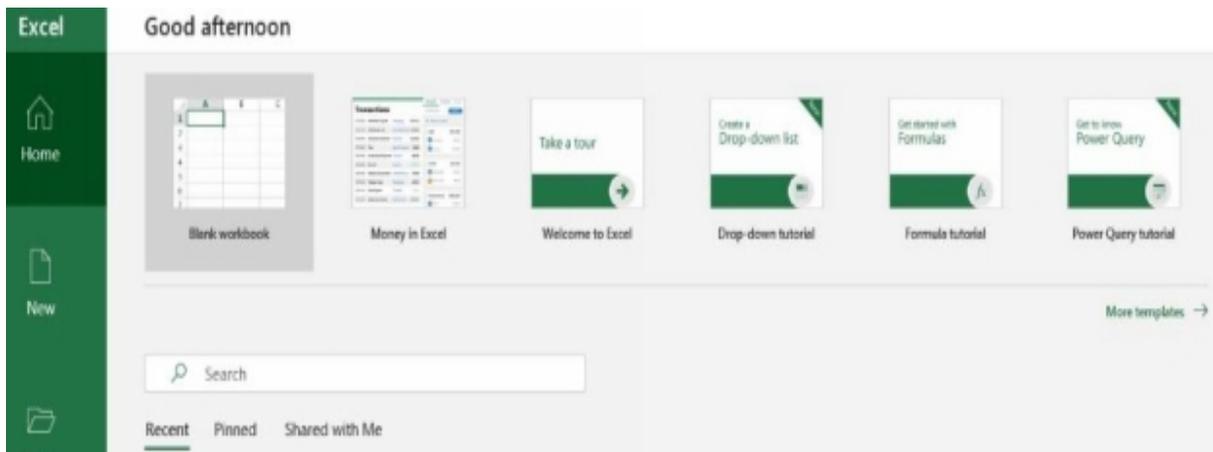


Fig 2: The screenshot of the first appearance of Excel when opened for the first time (captured from Excel 365)

From the screenshot I have above, when **Blank workbook** is clicked just once, a workbook is opened. As the sheet is opened, you can start entering the data you want to have in the cells of the workbook. The data can be text or numbers. You can also insert charts and tables in the workbook if the need arises.

Blank workbook Explained

When you select **Blank workbook** as your Excel application opens, a working environment opens. You can enter the data you want to have inside of it. The opened blank sheet is the environment where you are to work in. You can create more sheets inside one workbook. At the end, you save the entire sheets in a workbook with one single file name, but you can give the

different sheets in the workbook individual names as they are housed in the workbook.

How to Create Sheets in a Workbook

In this subheading, I will walk you through on how you can create more sheets inside one Workbook. It is a simple task to complete within a short time. To achieve this task, do the following:

- As your Excel workbook is already open, drag your computer mouse down to the bottom part of your Excel workbook
- Click the plus sign (+) at the bottom part of the workbook for a new sheet to be added in the workbook as shown by the arrow in the picture below:

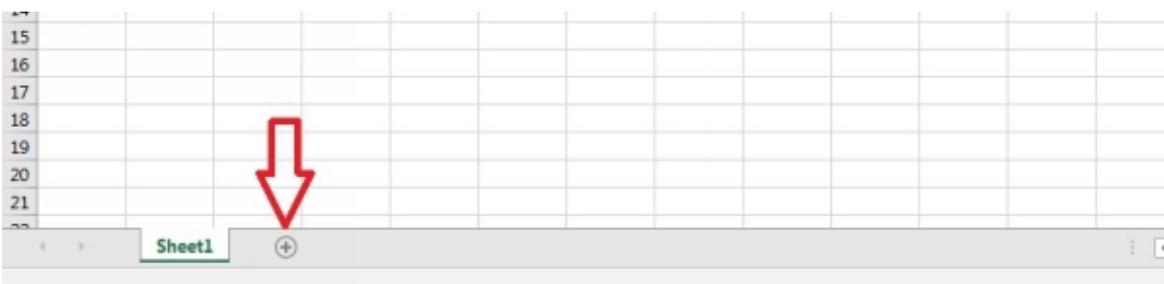


Fig 2.1: Click the plus sign for a new spreadsheet to be added in the workbook

You can click the plus sign for more spreadsheets to be added if you want to have more than one extra sheet. The addition of spreadsheets in a workbook is needed when you want to prepare Excel file that points at one area of interest but different departments. An example is when an employer of a big company wants to compose the names of his employees that work in different departments of the company. If there are ten departments, he can choose to have ten sheets all in one workbook.

UNDERSTANDING THE BASIC TOOLS IN EXCEL SPREADSHEET

This is the part 2 of this chapter. As I earlier stated, if you do not understand the basic tools in Excel spreadsheet, you will find it difficult to perform basic tasks in the application. In respect to this, I will teach you on these basic tools you need to know about.

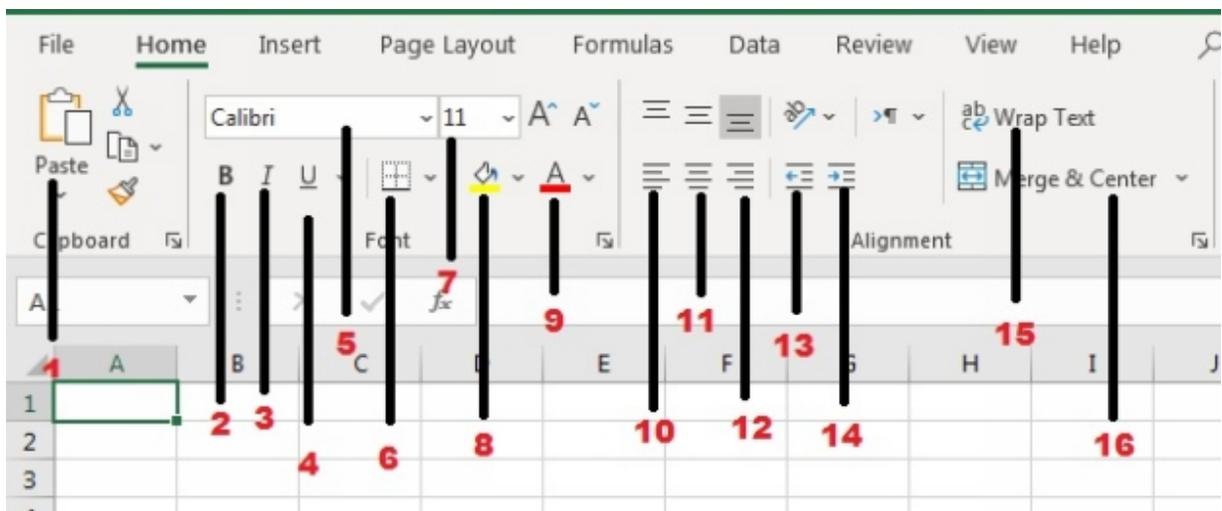


Fig 2.2(a): Basic Excel spreadsheet tools in the **Home** tab

Number 1: Paste

The number 1 tool as shown in Fig 2.2 is **Paste** tool. With **Paste** tool, Excel users can paste the text they copied from another cell of a spreadsheet into another. What the user has to do is to click the cell he or she wants to paste the text or number and then click the **Paste** tool for the data to be inserted into the cell. Also, there is a shortcut to paste data into any cell in Excel spreadsheet. The shortcut is to press **Ctrl + V** on your computer keyboard running Windows operating system.

Number 2: Bold

The tool labelled number 2 stands for **bold** . With this tool, Excel users can make texts and numbers thicker than they were before. Bold tool can be used to draw the attention of readers of the Excel file to a particular area of interest in the document.

Step by Step Guide in Making Text and Numbers Bold

If you want to make texts or numbers in Excel workbook bold, do these:

- Click the cell containing the word or number
- Click the **Home** tab of the Excel
- Select the bold button identified with the symbol **B**

Other steps you can take to make the texts or numbers in many cells of Excel spreadsheet bold are as follow:

- Highlight all the cells containing the data you want to make bold
- Click the **Home** tab
- Select the bold tool

Number 3: Italic

The number 3 is the **Italic** tool. This is another tool that can be used to draw the attention of any Excel reader to any spot on the document. Example of words in italic is “*smart words* ”. The words appear in slant fashionable way. That is what it implies for words to be in italic.

Number 4: Underline

The number 4 tool is still a tool used to separate some texts from the others. Number 4 tool is called the **Underline** tool. With this tool, you can underline text which you have in Excel spreadsheet.

How to Underline Text in Excel

To underline text in any cell of Excel workbook, do the following:

- Select the cell having the text you want to underling or highlight the cells having the words you want to underline
- Click the **Home** tab of the workbook
- Click the **Underline** tool

Number 5: Font

The tool labelled number 5 is **Font** . There are many fonts available in Microsoft Excel workbook. You can click the **Font** command to see the fonts in Excel. You scroll down to see the other available fonts. To change the font type of any text in a cell, click the cell containing the text once, click the **Home** tab, and finally click **Font** tool and select the font you want the text to be changed to.

Number 6: Border

The tool labelled number 6 is known as **Border** . You can use this tool to create bottom border in workbook. You can also use it to create border around text that are positions in cells of the workbook.

Number 7: Font Size

The number 7 in the picture stands for **Font Size** . With this tool, you can choose the size of the text you want in any spreadsheet. Most times, users choose bigger font sizes for certain text they have in the application. Take for instance that I want to list the names of my workers and their individual ages, I can use font size of 14 for the heading and then choose font size of 12 for the rest part in the workbook.

Choosing Font Size

To choose different font size for different text in the cell of Excel workbook, do the following:

- Select the cell containing the text that you want to change the font size
- Click the **Home** tab of the Excel workbook
- Click the dropdown at the **Font Size** tool
- Select the font size number you want to change the text to from the dropdown
- Hit the ENTER key of your computer keyboard

Also, as you take step 2, you can just click into the Font Size number and then type in the font size number you want, and finally hit the ENTER key of your computer keyboard for the text size to change.

Number 8: Fill Color

The number 8 is **Fill Color** tool. This is the tool you need to make the background of your cells colorful. To achieve this purpose, just select the

cells which you want to change their background color, click the **Fill Color** tool and select any color you want to change to from the color gallery. The tool is used to differentiate different items that are in different cells of a workbook.

Number 9: Font Color

The number 9 stands for the **Font Color** tool. The **Font Color** tool has effect on text color and not background of cells. With this tool, you can comfortably change the color of texts you have in your Excel sheets.

Steps on How to change Text Color in Excel

To change the text color or simply put the color of words and numbers in your Excel workbook, take these simple steps:

- Click the cell containing the text you want to change its color or highlight the cells containing the texts if you want to change the color of many words to one color
- Click the **Home** tab of your workbook
- Click the **Font Color** tool
- Select the color you want the text change to from the color gallery that will be opened to you

Number 10: Left Align

The tool labelled number 10 stands for **Left Align** tool. The **Left Align** tool is a text tool. With this, you can position the text you have in cell of Excel sheet toward the left margin of the cell. To align text in any cell towards the left, just click the cell containing the text and then select the **Left Align** tool.

Number 11: Center Align

The number 11 command stands for **Center Align** tool. With this tool, you can align the text you typed inside cells of Excel spreadsheet to the center. Just select the cell containing the words or figures, then click the **Center Align** tool which is under the **Home** tab.

Number 12: Right Align

The command labelled number 12 stands for right align. This tool allows you to align the text in your spreadsheet towards the right margin of the sheet. It positions the entire text and numbers in the right-hand side.

Number 13: Decrease Indent

The tool labelled number 13 stands for **Decrease Indent** tool. With this command, you can move text in a cell closer to the cell border. But by default, text in cells are in decrease indent state. As a result of that, when you click any cell that has texts inside of it, and click the **Decrease Indent** , you will not notice any change.

Number 14: Increase Indent

The command labelled 14 stands for **Increase Indent** . With this tool, you can move the texts in spreadsheet cells farther away from the cell border. To achieve this, just click the cell containing text and then click **Increase Indent** tool which is under **Home** tab.

Number 15: Wrap Text

The command labelled number 15 is the **Wrap Text** . This tool plays important role in Excel workbook. It is a tool you need to use to wrap text in each cell of workbook. In an explanatory way, this tool is used to position text in every cell to show all the text entered in cell.

Take for instance that you entered words in a cell, and you notice that the entire words are not contained in that cell. That is to say that it looks as if some words cut into the cell next to the cell where you entered the words due to the size of the cell.

To make all the words positioned in the cell where you intend them stay, you can apply the **Wrap Text** tool. To achieve this, click the cell where you started typing the words, click the **Home** tab of the workbook, and lastly click the **Wrap Text** . Immediately you do that, the text will adjust and get positioned inside that one single cell and all the entire words clearly shown in it.

Number 16: Cells Merge styles

The tool labelled number 16 is the **Cells Merge styles** . This tool allows you to merge different cells in workbook as one. With this tool, Excel users have the capacity to "Merge and Center" (ideal for a title), "Merge Across" (merges a cell across columns), or "Merge Cells" (combines cells across both columns and rows).

If you want to merge cells, select the cells you want to merge, click the dropdown at the **Cells Merge styles** command and select the style you want to merge.

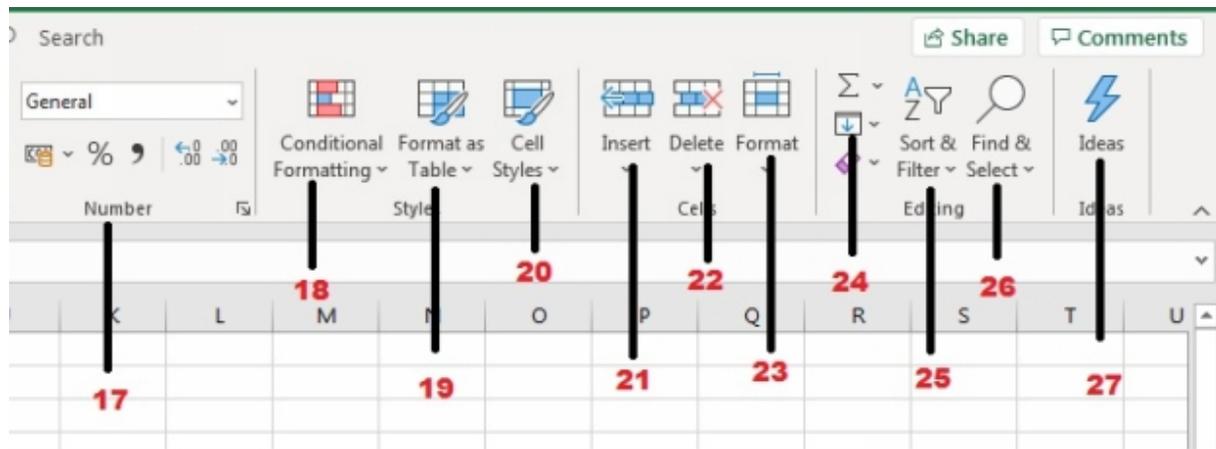


Fig 2.2 (b): Basic Excel spreadsheet tools in the **Home** tab

Number 17: Number

The group represented in number 17 is the **Number** group. The **Number** is a group name. Under the **Number** group, there are many Mathematical and Statistics symbols. These symbols include **Accounting symbols** , **Percent** , **Comma style** , **Increase Decimal** and **Increase Decimal** .

The accounting symbol has to do with currency. With this tool, you can choose whether you want to place dollars, euro, or pounds symbol in a number. To see the effect of the accounting tool, just type numbers in the cells, select the cells, then click the **Accounting Number Format** tool to select the currency you want to assign to the numbers.

Use the same steps to select other tools under the **Number** group to apply on different numbers you have in different cells. They are all simple steps that will give you the expected result in return.

Number 18: Conditional Formatting

The tool labelled number 18 is known as **Conditional Formatting** . With **Conditional Formatting** tool, Excel users can apply conditional formatting to words and make a difference. To see the effect of this tool in a cell containing text, click the **Home** tab and then select the **Conditional Formatting** tool. When you do this, you will be shown some options, select any action you want to take place from the list.

Number 19: Format as Table

The tool labelled 20 is known as **Format as Table** . With this tool, you can format the cells in a workbook into tables rather than cells. In the other words, you can use this tool to convert cells to tables just like the one you can see in Microsoft Word desktop application.

Steps in converting Excel Workbook Cells to Table

I decided to create this as subheading so that you can understand how to use Format as Table tool in detail.

To convert cells in Microsoft Excel workbook to table, take these steps:

- Highlight the cells you want to convert to table format
- Click the **Home** tab which is as shown in the picture below:

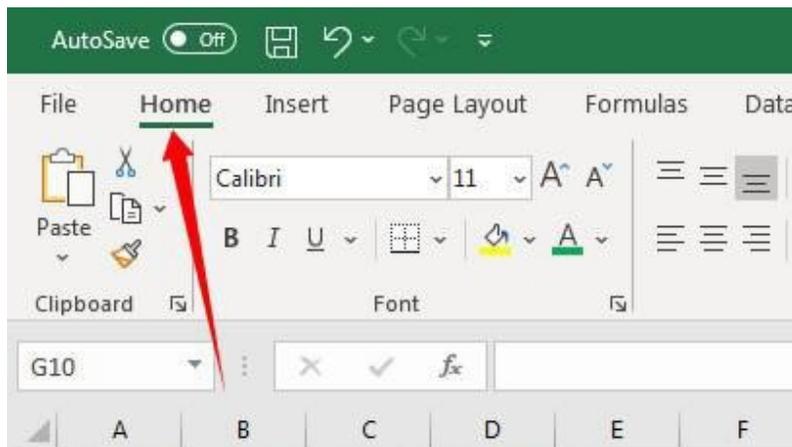


Fig 2.3: The **Home** tab shown by the arrow

- Click **Format as Table** command
- Select the table style you want from the options that will be shown to you
- Click **Ok** button of the dialog box

You can then start entering the content you want to have in the table.

Number 20: Cell styles

The tool number 20 is known as the **Cell styles** . Just as the name sounds, you can use the tool to choose style of cells you want to use to prepare your data in workbook. To choose cell styles, highlight the cells, click the **Cell styles** , and then select the style you want.

Number 21: Insert

Number 21 is known as the **Insert** tool. You can use the **Insert** tool to add cells, rows, column or insert new sheets in a workbook. The role played by this tool in Excel is unique. As a result of that, I will take it one by one.

How to add Cells, Rows, Columns, and New sheet

If you want to insert cells, rows, columns or new spreadsheet in your workbook, using the **Insert** tool at the **Home** tab, do the following:

- Click **Home** tab of the workbook
- Click any cell in the workbook where you want to insert cells, rows, columns or sheet
- Click the **Insert** tool
- From the options that will be shown to you, select the action that best fits what you want to do

Number 22: Delete

The tool labelled number 22 is **Delete** . This tool can be used to remove/delete rows, columns, sheet, and cells. If for instance you want to delete any cell of your workbook, do the following:

- Click **Home** tab of your workbook
- Click the **cell** that you want to remove. The cell may contain text or may not
- Click the **Delete** tool
- Select **Delete cells**
- In the dialog box that will appear, check an option of what will happen to the next cell once that particular cell is deleted
- Click the **Ok** button

Follow these same steps to delete column, rows, sheet.

Number 23: Format

The tool labeled number 23 is the **Format** tool. You can use this tool to change the size of cells in the Excel workbook. Other things you can do with this tool includes to hide cells, organize and protect sheets in a workbook and the workbook containing the sheets.

If you want to either change cell size, hide cells, organize, or protect your workbook, take these steps:

- Click the **Home** tab of Excel workbook
- Select the cell or cells to format, click the **Format** tool
- select the action you want to complete and that is all

Number 24: Sum symbol , Fill and Clear

The tools I wanted to represent in the part labelled number 24 are **Sum symbol** , **Fill**, and **Clear** tool. The functions performed by these tools relates to their individual name.

From the **Sum** tool, you can select any built-in function to solve some Mathematic problems. For example, you can sum numbers from the tool. You can highlight the numbers in different cells of the workbook, then click the **Sum symbol** tool and select **Sum** . Once you do that, the sum of the numbers will be inserted in the cell below the last one containing a value.

The **Fill** tool can be used to fill formula and text into adjacent range of cells. To complete this task, just highlight the cell containing text and number, click the **Fill** command, which is under the **Home** tab, and finally choose the fill direction.

Simply put, you can clear all text, numbers and formulas in cells of workbook using the **Clear** command. Just highlight the cells you want to clear the contents and then select the **Clear** tool.

Number 25: Sort & Filter

The command labelled number 25 is known as the **Sort & Filter** tool. It is one of the editing tools in Microsoft Excel. You can use this tool to comfortably sort and filters the items you have in your workbook. You can sort words and numbers using this tool.

How to Sort Items in Excel Workbook

Let me assume that you have list of names in your Excel workbook and you want to sort them alphabetically from A-Z in ascending order. What you need to get the deal done is the **Sort & Filter** command. You do not need to disturb your brain by doing that manually.

To sort the names alphabetically from A to Z, do the following:

- Highlight the entire cells containing the words you want to filter
- Click the **Home** tab of the workbook
- Click the **Sort & Filter** command
- Select **Sort A to Z** from the options

If the items you want to sort are group of numbers, when you click the **Sort & Filter** you are to select **Sort Smallest to Largest** or **Sort Largest to Smallest** depending on the result you want.

Number 26

The tool numbered 26 is the **Find & Select** command. You can use the command to find text, numbers, formulas, notes or conditional formatting in workbook. If you want to detect any word in your spreadsheet, just click the **Home** tab and then click **Find & Select**. Select the **Find** option and then type in the word you want to find in the **Find and Replace** dialog box as shown below:

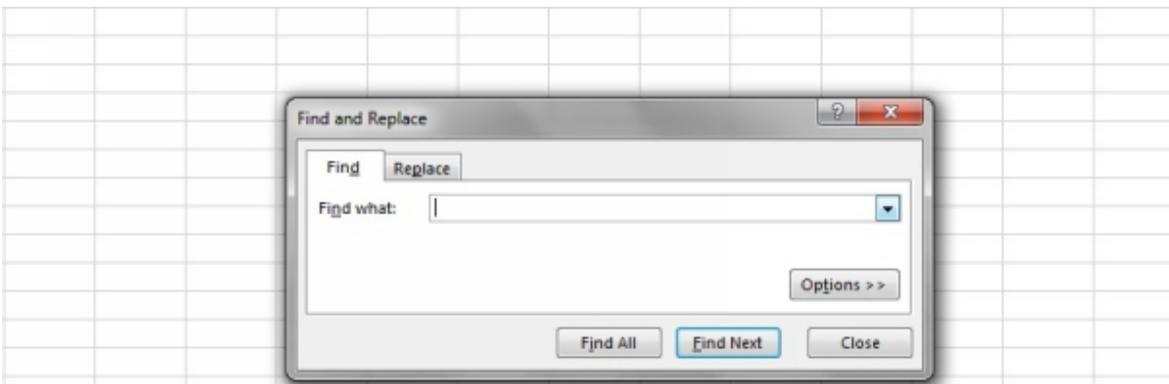


Fig 2.4: The **Find and Replace** dialog box

The next action you should take is to click **Find All** button. Within a short time, Microsoft Excel will show you where those words are in the workbook. The same steps you should take if you want to search for numbers in workbook.

Number 27

The tool labeled number 27 is the **Ideas** command. The tool is not available in older versions of Excel application. It is available in Excel 365 application. I will explain more under a separate subheading.

[Explanation on Ideas Command](#)

The **Ideas** command is one of the newly added commands that Microsoft added in Excel 365. So, you will not see this command if you are making use of older versions of Excel. It is a command that works with artificial intelligence. It makes suggestion of what you are likely to do with the data you have in Excel workbook.

The Ideas command works with internet connection. In the other words, if you want the command to work, your computer needs to be connected to internet.

Making my teaching on this command more practical, I can prepare data on workbook listing number of males and females in different classes of a school. If I click the Ideas tool after my data preparation, it will show me what I am likely to do with the data. If it is in line, I can click one of the suggestions to be inserted in the workbook.

Identifying the Undo and Redo Commands

The **Undo** and **Redo** commands are important tools used in Excel. These tools help to easily undo actions initially carried out earlier.

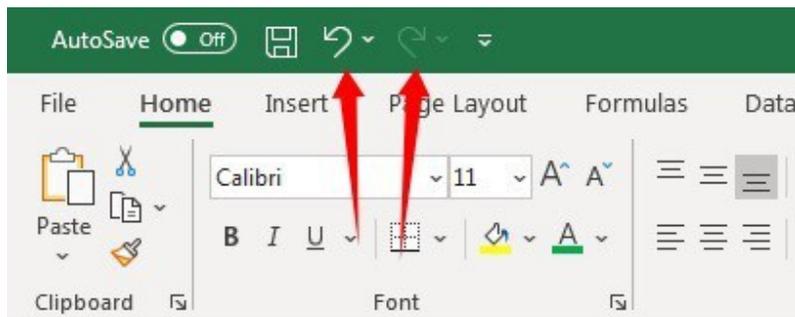


Fig 2.5: The Undo and Redo commands in Excel 365 shown by the arrows respectively

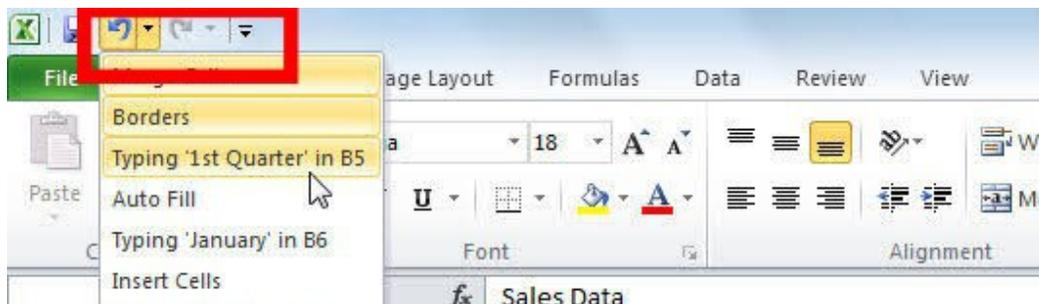


Fig 2.6: The position of the **Undo** and **Redo** commands in Excel 2010

You can find the **Undo** and **Redo** commands at the top left corner of your workbook interface. The Undo and Redo buttons have dropdown at the. With

those dropdowns in each, you can undo or redo any previous action carried out. To undo means to reverse any action previously carried out in Excel. On the other hand, to redo means to restore any action that were previously undone.

THE BASIC TABS IN EXCEL

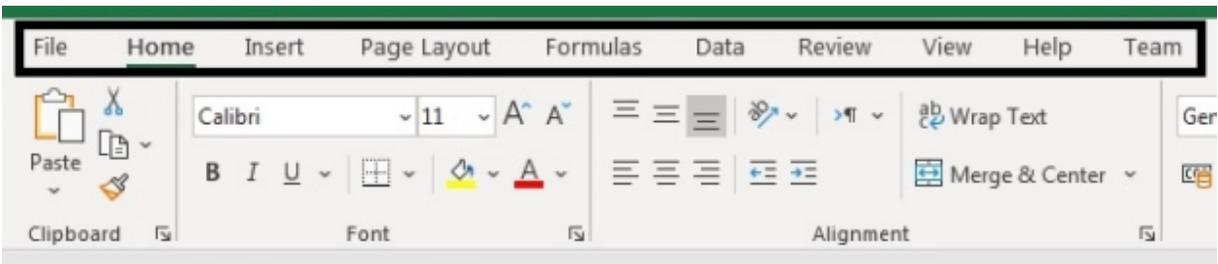


Fig 2.7: Picture shows basic tabs in Excel

There are basic tabs available in Excel. Through each of these tabs, you can complete specific tasks. The tabs available in the recent version of Excel are **File, Home, Insert, Page Layout, Formulas, Data, Review, View, Help** and **Team**. On your own, you can add other tabs/ribbons of your choice. You can also remove those you do not want to have. I will walk you through on that.

CUSTOMIZATION

How to Add or Remove Tabs (Ribbons) in Excel

If you want to add or remove tabs in Excel, take these steps:

- Click **File** tab
- Scroll down and click **Options** commands
- Click **Customize Ribbon**
- In the **Main Tabs** , tick the tabs you want to add and click **Ok** button
- If your intention is to remove tab, in **Main Tabs** , untick the tab you want to remove and click **Ok** button

Changing Language

Every version of Excel comes with a default language. So, it is left for you to change to any language of your choice.

If you want to change language in Excel, take these steps:

- Click **File** tab and followed by **Options**
- From the list click **Language**

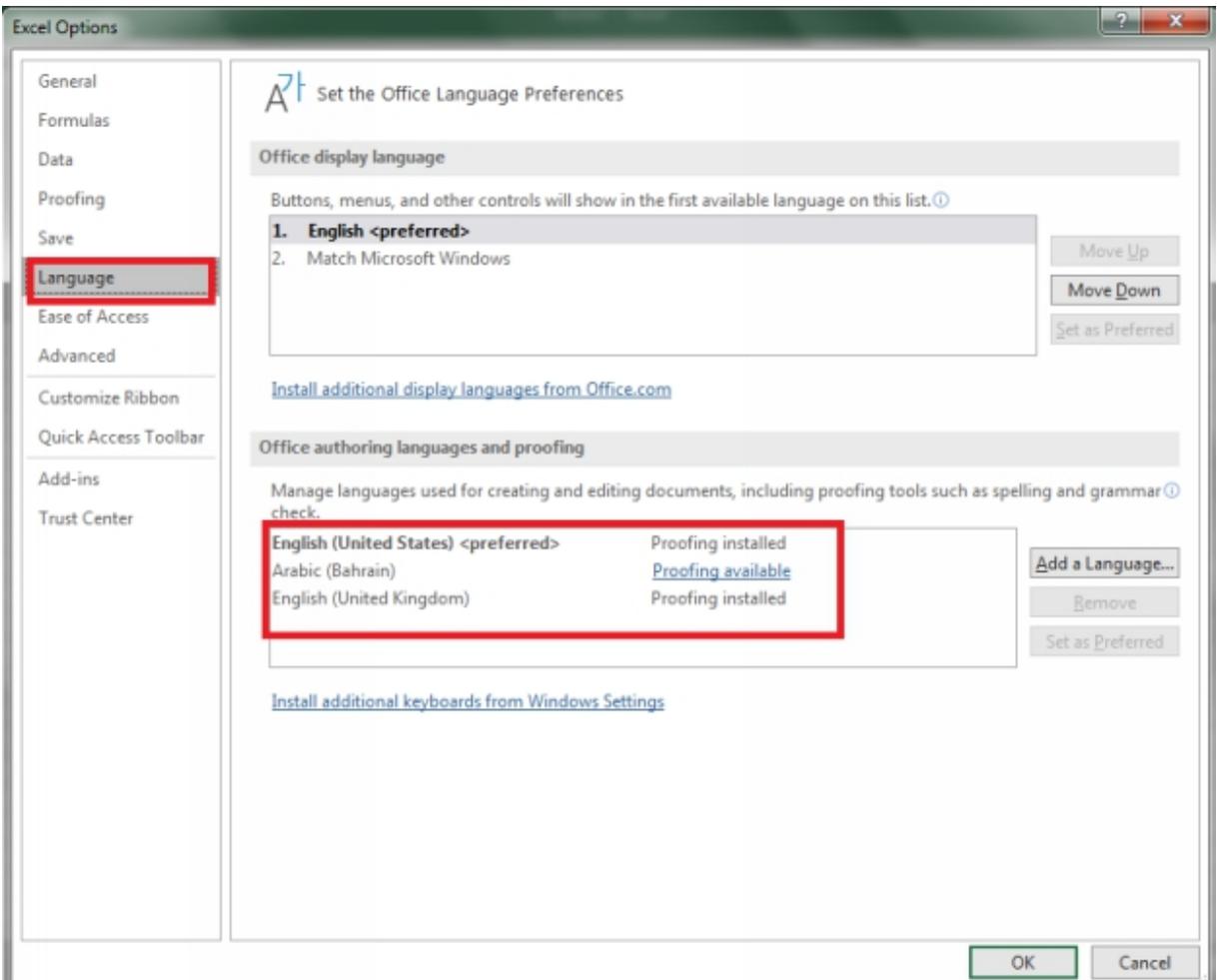


Fig 2.8: Screen when **Language** is clicked

- Under the **Office authoring languages and proofing** , select the language you want to change to and click **Ok** button, but if the language you want to change to is not there, click **Add a language** , select the language from the list that will be shown to you before clicking the **Ok** button.

Know that you have to restart your Excel for the change you made to be effective.

Selecting a Cell

If you want to select a cell, just click on the cell and it is selected. When a cell is selected, it is enclosed in green colored design.

How to Select Cells

If you want to highlight many cells once, there is approach to it. In that case, you are not selecting only one cell. An approach I use in selecting cells is the one I call **Clicking and Dragging** .

- First click the cell you want to start from

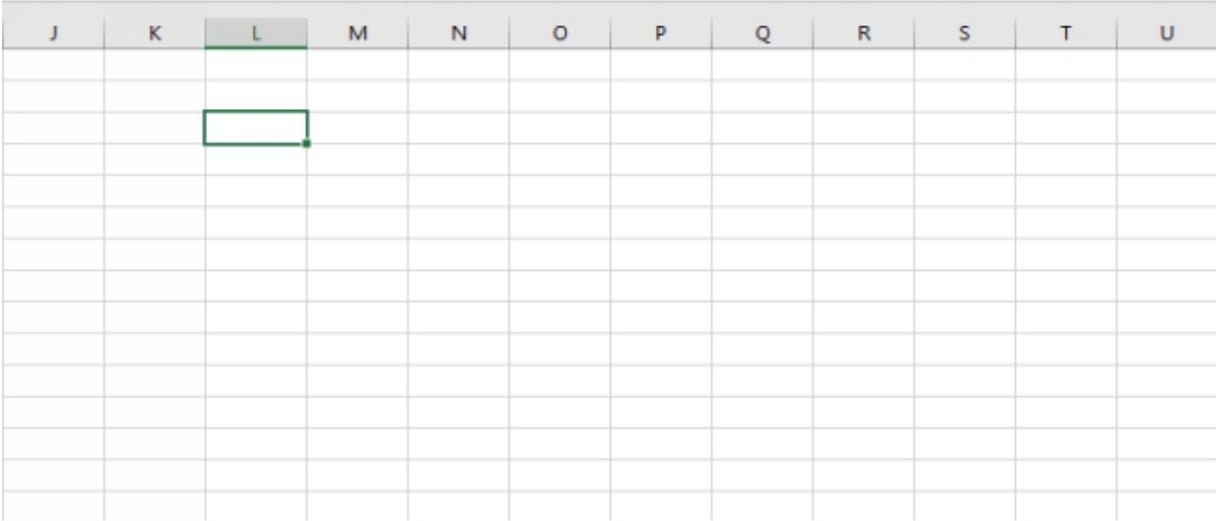


Fig 2.9: Selecting cells

- Position your pointer in the middle of the cell
- Hold down your mouse button
- Drag your pointer over all the cells you want to select

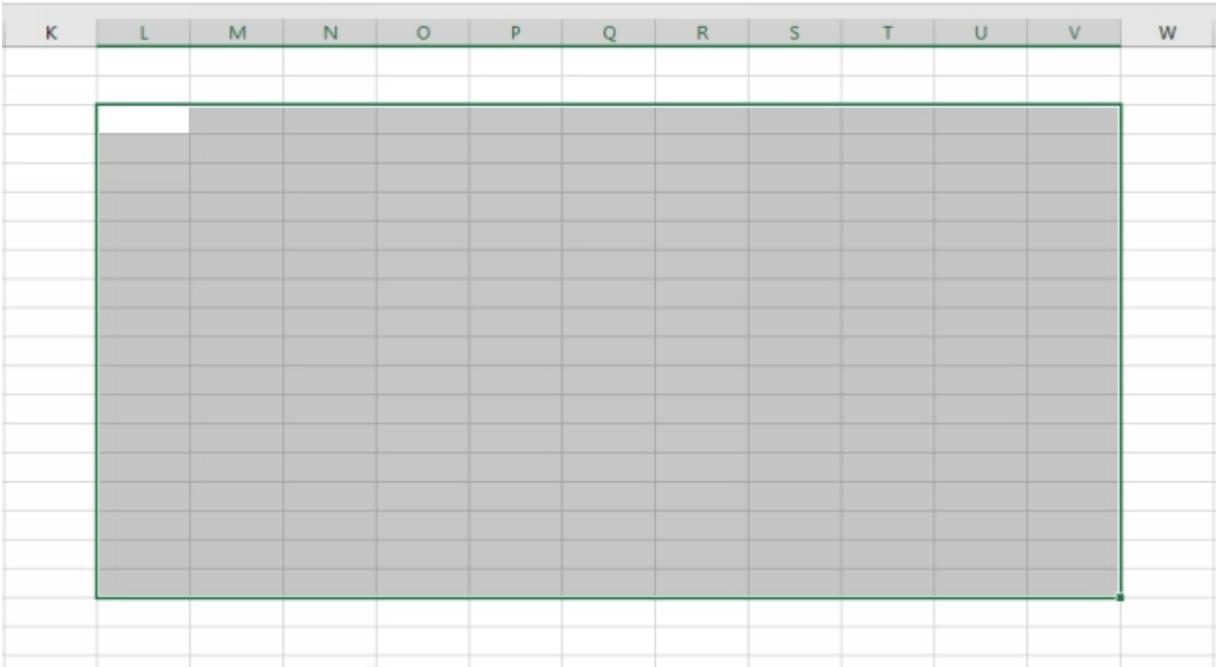


Fig 2.1.1: Selected/highlighted cells

- Release your mouse button

When the cells are selected, you will notice that the background color of the first cell is still white. That does not mean that the cell is not selected. It is how Excel spreadsheet is designed.

CHAPTER 3

Managing Excel Workbook and Ribbons

Our working environment in any Excel version is known as the workbook or spreadsheet. In this chapter, I will teach you on how you can utilize your workbook effectively. I will also guide you on how you can use the ribbons made available by Microsoft in their Excel application. Just get ready because there are many skills you will learn from this book chapter.

EDITING IN WORKBOOK CELLS

In this section, I will work you through on how you can perform some editing tasks in cells of any workbook.

Entering Data in a Workbook

Entering text in Excel sheet is simple but you may find it difficult to do if you are just working on the application for the first time without prior proper tutorial and practice on it.

To enter information in cells of Excel workbook, do these things:

- Click the cell where you want to enter your text once
- Start typing your text
- When you are done typing, just click out or simply click another cell to exit from the current cell you are typing in.

Editing Text Already Entered in a Workbook

I really found this aspect difficult when I was just a dummy in the use of Excel desktop application. That time, I would like to delete just a letter from a word in the cell but ended up deleting the entire words inside of the cell.

To edit any word you have already entered in a cell of excel, do these:

- Double-click on the cell containing the word you want to edit for there to be blinking of the cursor in the cell
- Take your cursor pointer to the letter you want to delete
- Use the backspace key to delete the letter or the word you want to remove
- Click out when you are done with the task

How to Insert Dates and Time in a cell

You can easily insert dates and current time in any Excel workbook. You may like to keep the exact time you composed a report in Excel spreadsheet. You do not necessarily need to check time before you can do so. With the right short commands, that can be achieved.

Follow my guide below to get the task completed:

- Click the spreadsheet cell you want to insert the date or time
- To insert the current date in the cell, press **Ctrl +;** (semi-colon). I will break it down if you do not understand the command properly. What I instructed you should do is to first press the **Ctrl** key of your computer keyboard followed immediately by **;** key of your computer keyboard.
- To insert the current time in the cell, press **Ctrl +Shift +;** (semi-colon). The instruction is that you should press the **Ctrl** key of your computer keyboard followed by the **Shift** key and finally the **;** of your same computer keyboard.
- To insert the current date and time in the cell, press **Ctrl +;** (semi-colon), then press **Space** key of your computer keyboard, and then press **Ctrl +Shift +;** (semi-colon). Immediately you do this, the current date and time will be inserted inside your spreadsheet cell.

MANAGING EXCEL RIBBONS

You may like to hide some tabs you have in Excel workbook but do not know how to do it. On the other hand, your Excel tabs may be hidden, and you may like to make them visible but do not know what to do. Furthermore, your Excel toolbar section may not be visible to you because you mistakenly click a command, but you do not know how to take it back to its formal state. Whatever is the case, we will discuss these issues here and at the end solution given.

How to Hide Ribbons

By default, the ribbons which is also known as tabs are visible to Excel users. But you can decide to hide them by reason best known to you. To hide tabs that are available in Excel workbook, follow this guide:

- First, click the **Ribbon Display Options** button located at the top right-hand corner of the workbook as shown in the picture below:

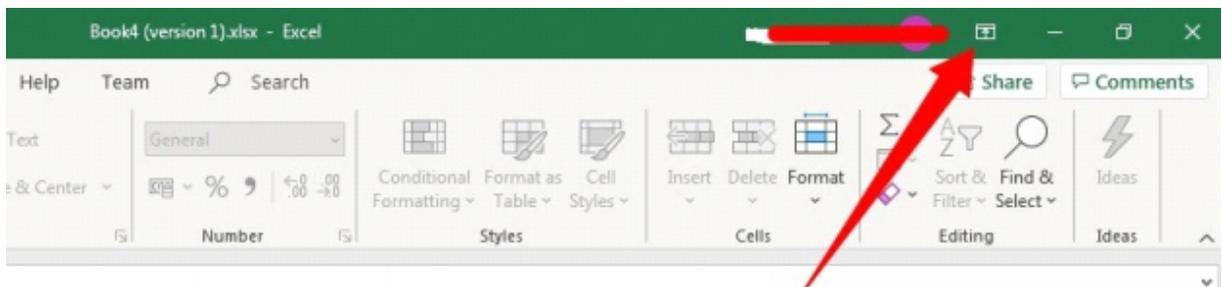


Fig 3: The **Ribbon Display Options** button shown by the arrow

- From the options that will show up, select Auto-hide ribbons as shown below

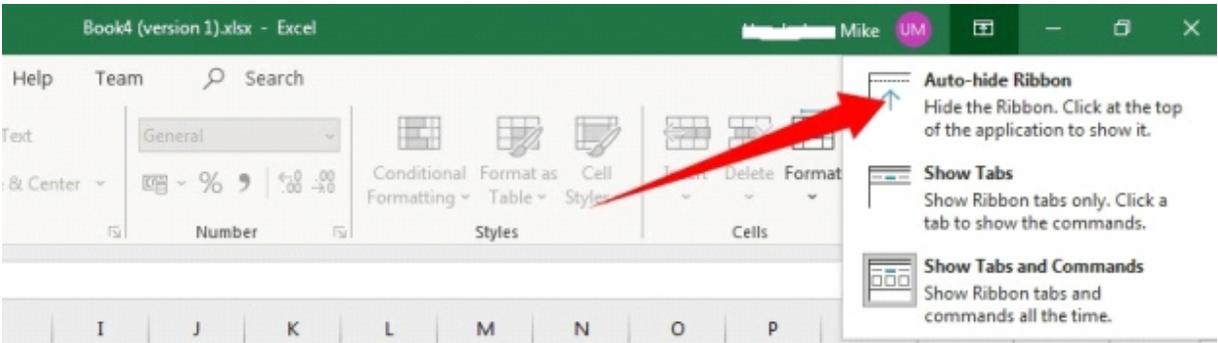


Fig 3.1: **Auto-hide ribbon** option pointed at by the arrow

Immediately you click the above button, the ribbons that were initially showing in the workbook will be hidden.

Guide on How to display only Ribbons in Excel

You can choose to display only tabs at the top section of your spreadsheet. To achieve that task, do the following:

- Click the **Ribbon Display Options** tool
- Select **Show Tabs** from the options that will be displayed to you

Choosing to Show Both Tabs and Commands in Excel Workbook

If you want both ribbons and commands (toolbar) to be displayed at the top section of your Excel interface, do the following:

- The first step you must take after you open your Excel workbook is to click the **Ribbon Display Options** button located at the top right-hand corner
- Select **Show Tabs and Commands** from the available options

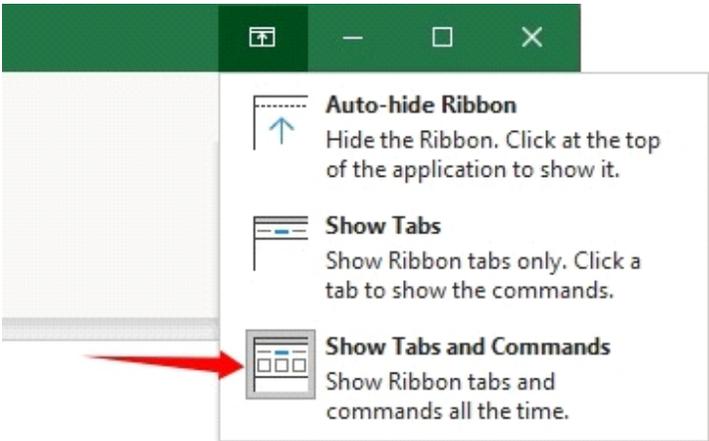


Fig 3.2: Select the option shown by the arrow

COMMENTS IN EXCEL

The Comments and Comment Commands Explained

Does this subheading look confusing to you? It is okay if it does. They are two different commands used to complete different tasks.

Comments Command

The **Comments** command is located at the topmost right-hand side of your Excel. In fact, it is the last command on the topmost right-hand of the screen.

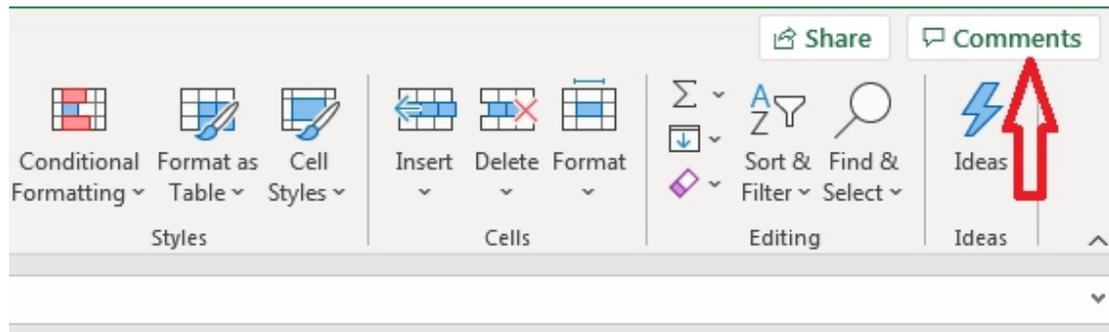


Fig 3.3: The position of the **Comments** command of Excel

With the **Comments** tool, you can see the comments on any part of your spreadsheet. Take for instance a member of your work team sent an Excel file to you and there are comments attached to the file which you did not know the part of the document where they are. Once you click the **Comments** command, you will be shown their locations and you can read the information in the comments clearly.

Comment Command

This is a command that you can use to add comment to any part of your Excel workbook. Take for instance that you are preparing report to be sent to a group of people, you can use the **Comment** tool to add comment to any part of the cell that you feel they will not understand properly. Maybe a cell of the financial report contains number sum of money the organization made in 2018, 2019, and 2020. You can click that cell, click **Insert** tab and then click **Comment**. In the Comment box that will show up, you can write comment

like “This is the sum total amount of money made in 2018, 2019 and 2020”
just to make your point clear. After that, click post button.

FILE SHARING IN EXCEL

The reason you create Excel file sometimes may not be only for your own use. You can also create the file to share with your team which you can also call your coworkers. Maybe your employer instructed you to prepare your department financial report in Excel and after saving the file needs to send it across to other workers in other parts of the company where you work.

The question is, how do you send the financial report to them? Does Excel application has tool that will allow you to do so? Are there avenues through which you can send the report to them? The answer is yes. There are means through which you can forward your prepared report to your teams. The sending of these your Excel file to your team is what we can call sharing.

Sharing Your Excel Document with Share Tool

There is a **Share** tool in the recent days' versions of Excel. But the Share button is lacking in old versions of Excel application, example is Excel 2007. Irrespective of this, there are only few users of old Excel application versions.

With the share tool, you can easily share your Excel document/file when the workbook is still open. To share your Excel file, do the following:

- First, click the **Share** tool by the top right-hand corner of your Excel spreadsheet interface

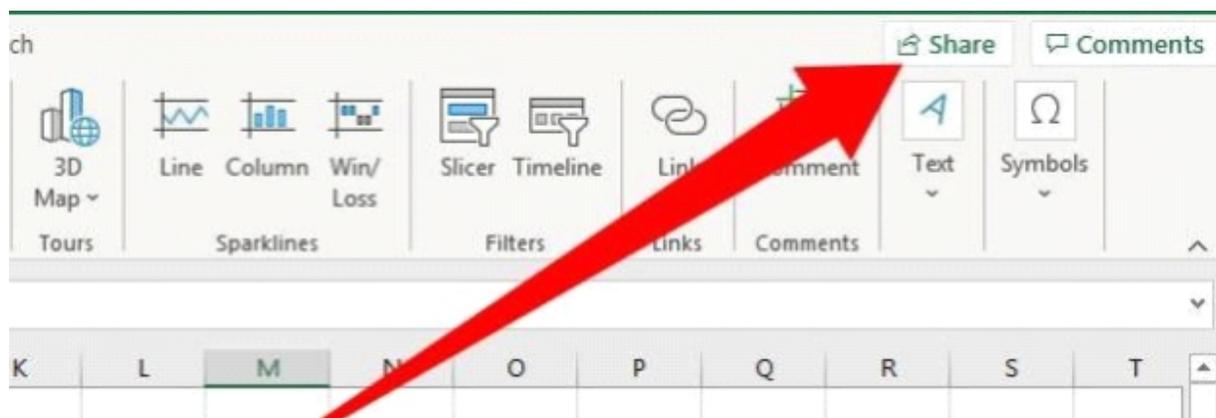


Fig 3.4: Excel **Share** tool shown by the arrow

- You can choose to share to your document online in OneDrive Microsoft cloud

When you select to share by first saving in your OneDrive, the Excel system may ask you to first login to your OneDrive account before you can successfully share the file with your OneDrive account

- You can choose to share your file in **Excel work** or **PDF** format. I recommend you choose Excel workbook option. When you do that, a space will be provided for you to type the email addresses of the people you are sending the file to. When you finish entering their email addresses, send it to them. For this method to be successful, your computer must be connected to internet.

How to Share Excel Workbook File Using link

Another way through which you can use to share workbook with people is by generating link to the file in which you can share with people who you want to access the file.

To generate link to a workbook and share with people, take these steps:

- Click the **Share** tool of the workbook
- Click **Get a link**
- Under **Choose an option** , select **View only**
- Click **Create link**
- Copy the generated link

You can share the link to anyone you want to have access to the file.

CHAPTER 4

Completing Tasks Through Tabs

There are works you can complete through some tabs built in by Microsoft in their Excel application. I will do well to explain some through this chapter. Let us get started without taking much time.

MANAGING SPREADSHEETS

I will be teaching you how to remove and rename sheets in this heading.

How to Remove Sheets in a Workbook

Sometimes, you may have many spreadsheets in a workbook. If you want to remove any among them, this guide will help you.

To delete any sheet, follow these steps:

- Click on the sheet name

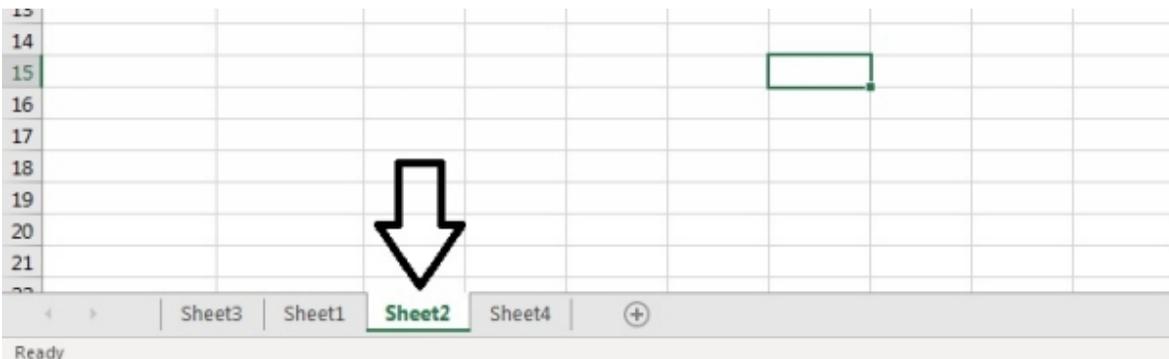


Fig 4: Removing a sheet from a workbook

- Click the **Home** tab
- Click **Delete** tool
- From the available options, select **Delete Sheet**

That is all, and that sheet is removed immediately.

Note: If there is only one sheet in the workbook, that cannot be deleted. You must have at least two sheets in the workbook to be able to delete one.

How to Rename Sheets in a Workbook

Sometimes you may like to customize the sheets you have in your workbook by giving them unique names instead of allowing them to appear with default

names like Sheet1, Sheet2, Sheet 3 and so on.

To rename a sheet in a workbook, do these:

- Take your pointer down the Excel sheet environment
- Right-click the default name of the sheet you want to change

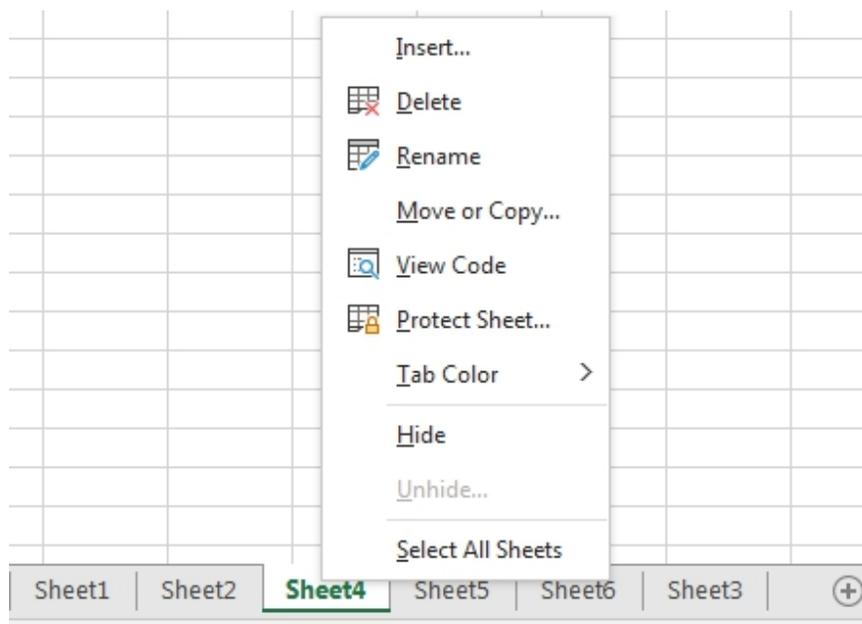


Fig 4.1: Picture shows options

- Click **Rename**
- Type in the new name
- Tap **Enter** key on your computer

UNDERSTANDING REVIEW TAB

There are many commands in the Review tab. I will explain the commands and the tasks you can complete with them:



Fig 4.2: Picture shows the commands in Review tab

PROOFREADING IN EXCEL

Proofreading tools are available in **Review** tab of Excel desktop application. I will guide you on how these commands work and how to make good use of them as well.

Spelling

Spelling command allows you to check any possible error in words in your workbook. When you click **Spelling** command under the **Review** tab, Excel system will ask the question “ **Do you want to continue checking at the beginning of the sheet?** ”. Click the **Yes** button for the system to run check for any possible grammatical errors in the workbook. If errors are found, Excel will make suggestion of some words you are to pick from. Just select the word that is correct and click **Change** followed by **Close button** . If no error is detected, the system will tell you that you are good to go.

THESAURUS

The **Thesaurus** command is used to find words that means almost the same to the one selected. To perform task with **Thesaurus** command, click a cell containing a word, select **Review** tab, and finally the **Thesaurus** command, and immediately you will see the result.

Workbook Statistics

With **Workbook Statistics** command, you can see information on the statistics of activities that have been carried out in your spreadsheet. The information that is display when you click this command are number of cells in the workbook, cells with information, end of sheets, tables in the workbook, and the number of formulas in the workbook.

CHECKING BEST PRACTICE STATUS IN EXCEL

Review tab of Excel has accessibility check tool built into it. This tool helps make sure you have done things right in your workbook

Check Accessibility

The **Check Accessibility** command is a tool you need to check if you have maintained best practice in your Excel workbook or not. To check the accessibility status of your workbook, click the **Review** tab followed by **Check Accessibility** . Once you do that, the system will give you feedback immediately.

DEFINITION AND SEARCH IN EXCEL IN EXCEL

The recent versions of Excel have what I call inbuilt dictionaries and research tool. This tool is accessible through the Review tab in interface.

SMART LOOKUP

The **Smart Lookup** tool allows you to find the definition and further research of any word in any cell of a workbook. With this command, you can still search for images right inside the Excel workbook. If you want to use **Smart Lookup**, click the cell containing a word followed by **Review** tab. The next you are to do is to click the **Smart Lookup** command. You will see information about the word displayed by the right margin of your workbook. There is **Define** and **Explore** headings available. If you select **Explore** , it will give you research on the word including images. The source of the information is quoted.

Translate

With the **Translate** , Excel users can translate words from one language to another. This command works with internet. To translate a word to another language, select the cell containing the word, and click **Review** tab. When in Review tab, locate the **Translate** command and click it. Select your language followed by **Insert** . As you do this, the translated word will replace the initially selected word in a cell.

The above translation steps are for Excel 2019 or Excel 365 users. But if your Excel version is from Excel 2010 to 2016, they have their own options when you click **Translate** command which are shown in the picture below:

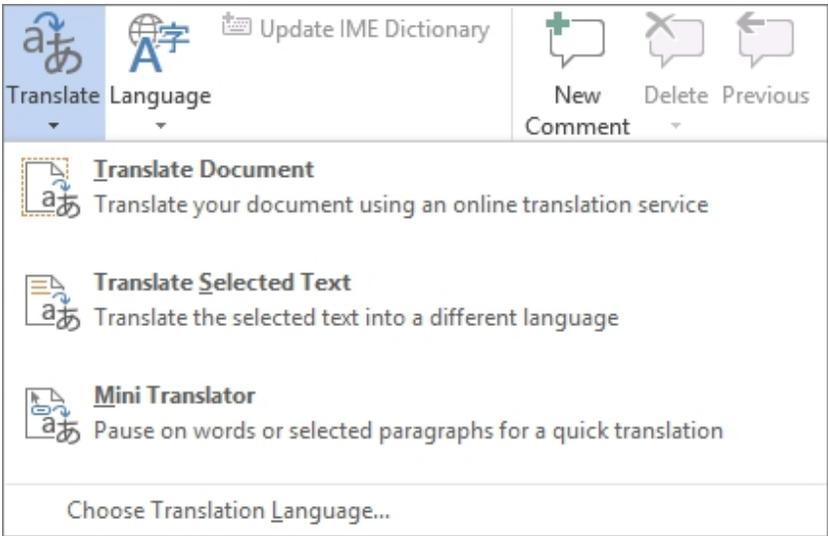


Fig 4.3: Translate options available for Excel 2010 to 2016

From the options, you can select the one that best matches what you want to do.

COMMENTS

I have explained this command before, but I will do that again because it falls under Review tab. **Comment** is a group in the Review tab of Excel. **New Comment** command allows you to add comment to any part of your cell. Just click the cell where you want to add the comment followed by the command. On the hand, you are to use the **Delete** command to delete any comment in any cell. Just click a cell with comment and then **Delete** to remove the comment. The **Previous Comment** command allows you to see the previously added comment in the spreadsheet if any. And **Next Comment** takes you to the next comment in the workbook if any. When you click **Show Comments** , it displays the comments that are in a workbook if any is available.

MANAGING NOTES IN CELLS

This is a command that works like the comment tool. With this command, you can comfortably add note to cells. When the note is added, you cannot see it in the cell until you click the Note command and select the option to see it.

Steps in Adding Note in a Cell

Take these steps to add a note in a cell:

- Select the cell to add the note
- Click the **Review** tab
- Click the **Notes** command

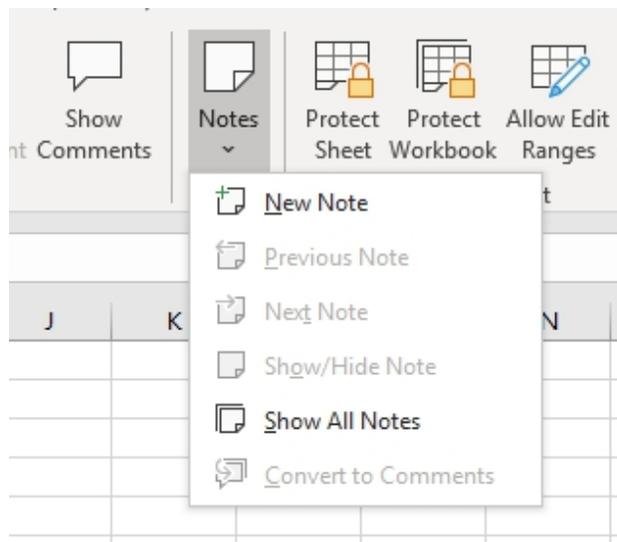


Fig 4.4: The Note options

- Select **New Note**
- Type your text
- Click out after typing

When you bring your pointer close to the cell where the note is attached, you will be shown its content.

CELLS, SHEETS AND WORKBOOK PROTECTION

In this subheading, we will be discussing how to protect cells, spreadsheet or the entire workbook which contains many sheets.

Sheet Protection

The **Protect Sheet** command allows Excel users to protect their sheets so that another person will not change the data in it. If you want to protect the sheet which you have your data in, click the **Review** tab and then **Protect Sheet** command. A dialog box will show up which is shown below:

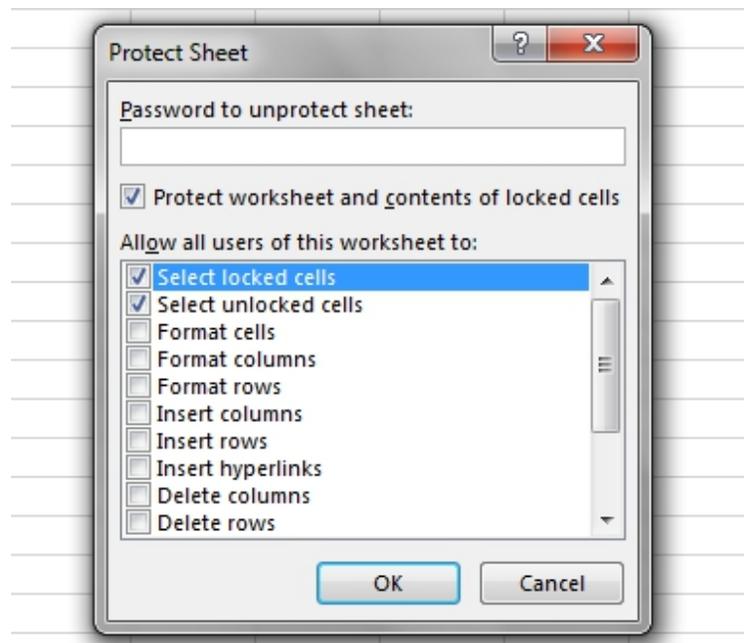


Fig 4.5: Protecting of a spreadsheet in progress

In the **Password to unprotect sheet** , type in password that you want to use for the spreadsheet protection. When you share this sheet with others and they want to open it, they have to ask you for password which you will give to

them to open it. Under the **Allow all users of this worksheet to** options, you can tick the actions you want those that you will share the sheet with to be able to take. Click **OK** button for the sheet to be fully protected.

Protect Workbook

A workbook can contain many sheets inside of it. A workbook is like a book with many pages inside. The **Protect Workbook** command allows you protect workbook that may contain many sheets. To protect a workbook from unauthorized access by others, first click the **Review** tab. Select **Protect Workbook** and then type in password for the workbook full protection in the dialog box that will show up. Click **OK** button of the dialog box.

Allow Edit Ranges

The **Allow Edit Ranges** lets Excel users set up password protection on ranges of cells and to choose which people are allowed to edit the cells.

Unshare Workbook

The **Unshare Workbook** command allows you to stop sharing your workbook file with people. This command is not enabled by default.

HIDE INK

As the name of this tool sounds, you can select it to hide all the digital inks in Excel workbook. It is a tool in the **Review** tab. But if there is no ink on the workbook that you are working on, when you click it, you cannot be able to select any option. This command is available only in Excel 2019 and Excel 365.

I thought you how to add/remove tabs in chapter 2. If through that guide you added **Draw** tab, you will be able to draw and highlight data with ink. When you draw with the ink tool available in the **Draw** tab, you can select the **Hide Ink** command under **Review** tab to hide all the digital ink.

1		ITEMS	YEAR						
2		APPLE							
3		MANGO							
4		ORANGE							
5		PEAR							
6		MEAT							
7		FISH							
8		WATER							
9		DRINKS							
10		WINE							
11		BREAD							
12		CARROTS							
13									
14									

Fig 4.6: Before applying any Hide Ink option

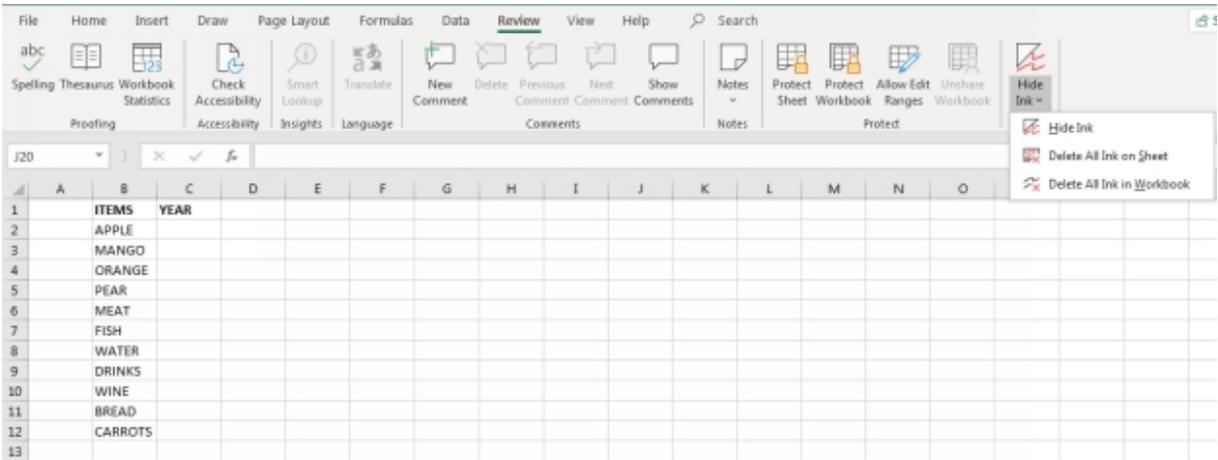


Fig 4.7: After Selecting **Delete All Inks in Workbook** option from the **Hide Ink** command

GETTING HELP FROM SUPPORT AND TRAINING

Microsoft in her wisdom has **Help** tab attached to the Excel program. Through this tab, you can get help relating to the issue you may encounter while using the application. Also, you can get trained by the company's experts.

Contacting Support

To contact the Microsoft Excel support, do these:

- Click the **Help** tab
- Select **Contact Support** as shown in the picture below:

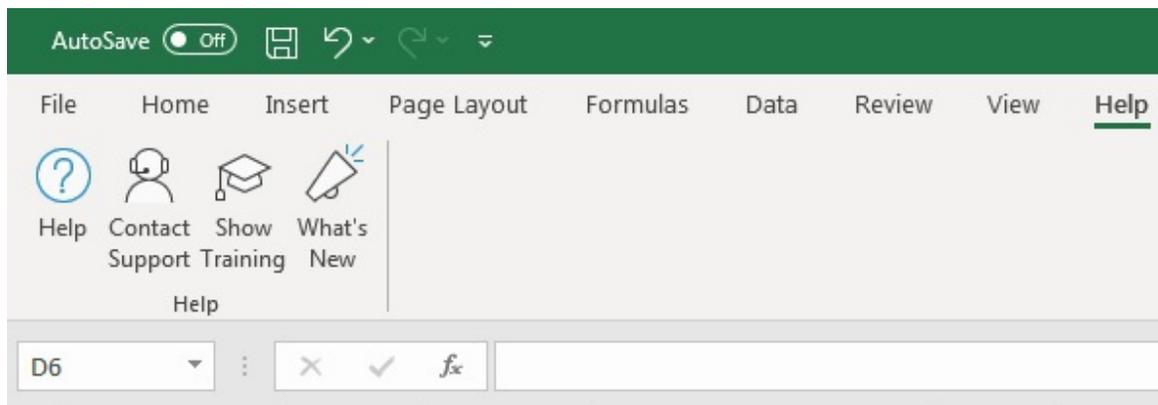


Fig 4.5: Getting **Help** from Microsoft

- Write to them, but know your computer needs to be connected to internet

Show Training command

With **Show Training** under the **Help** tab, you can access to online training contents to learn more on Excel.

What's New

What's New command is available in Excel 2019 and Excel 365. With this tool, you will know about new features that are added in the application.

CHAPTER 5

Charts in Excel

Charts is important in every business and for individual use. It is used for analysis and comparison. Many companies use charts to show their annual performance. Charts are important tools which also have academic application.

WHAT IS A CHART?

A chart is defined as a graphical representation of data, in which the data is represented by symbols, slices, structures or bubbles. There are many types of charts that can be plotted in Excel spreadsheet, and I will discuss some of them in this chapter

BAR CHART

A bar chart is defined as a type of graph used to display and compare the number, frequency or other measure for different discrete categories of data. Example is comparing the number of male with female students in different classes in a secondary school.

How to create a Bar Chart

To create a bar chart in a workbook, do the following:

- Prepare your data

Example of prepared data is the one I made which is shown below:

	A	B	C	D	E
1		ITEMS	NUMBER		
2		APPLE	100		
3		MANGO	300		
4		ORANGE	128		
5		PEAR	265		
6		MEAT	146		
7		FISH	200		
8		WATER	400		
9		DRINKS	500		
10		WINE	350		
11		BREAD	140		
12		CARROTS	440		
13					

Fig 5: Data for bar chart

- Select the data
- Click the **Insert** tab
- In the **Chart** group, click **See All Charts** icon

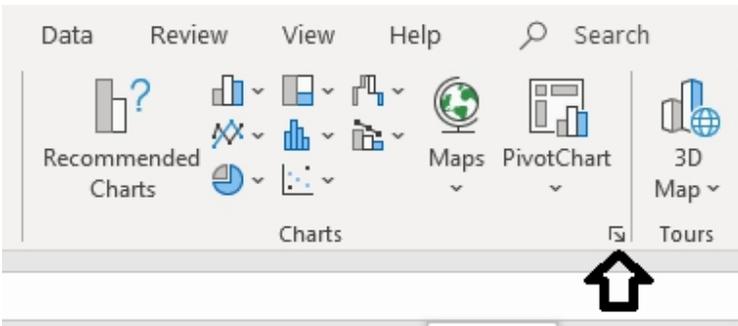


Fig 5.1: See All Charts icon pointed by the arrow

- In the **Insert Chart** dialog box that will appear, select **All Charts** heading
- Select **Bar** from the options
- Select any style of bar you want

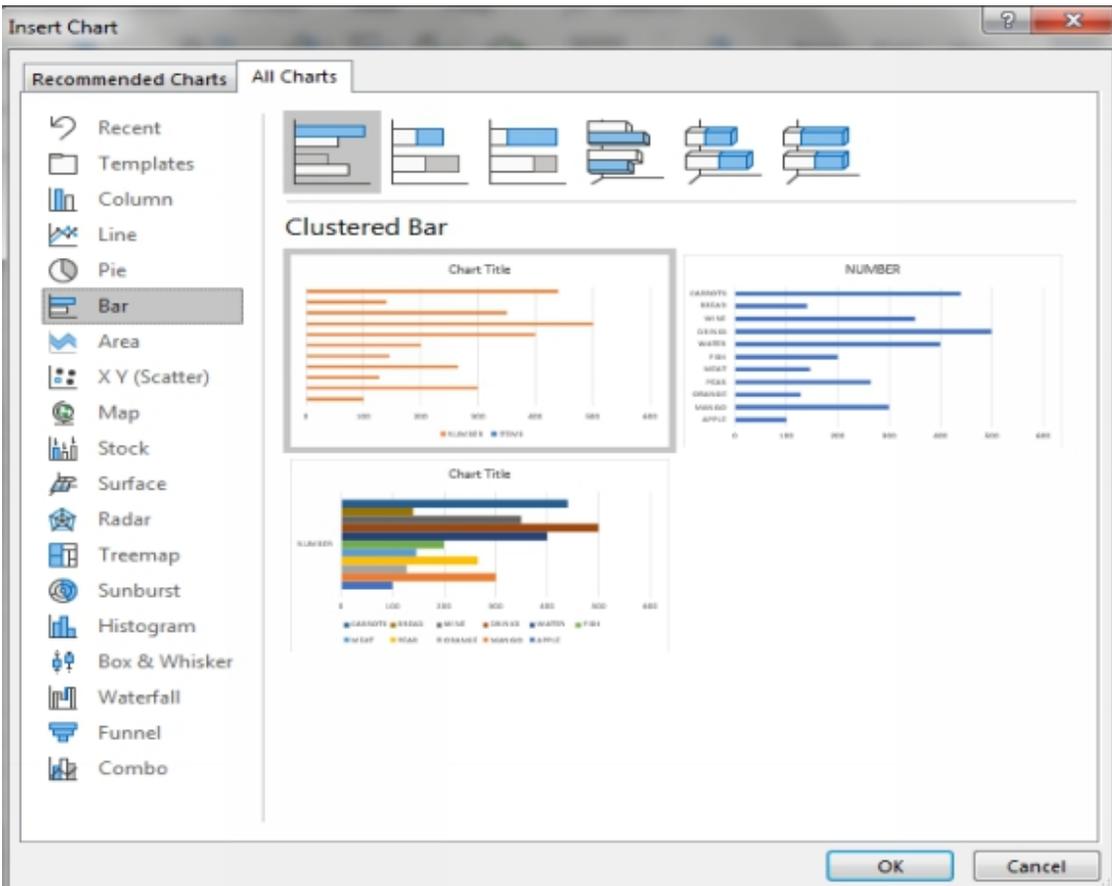


Fig 5.2: Click any styles of bar chart you want to have from the samples

- Click **OK** button

Once you click OK button, the chart is inserted in your workbook like the one I have below:

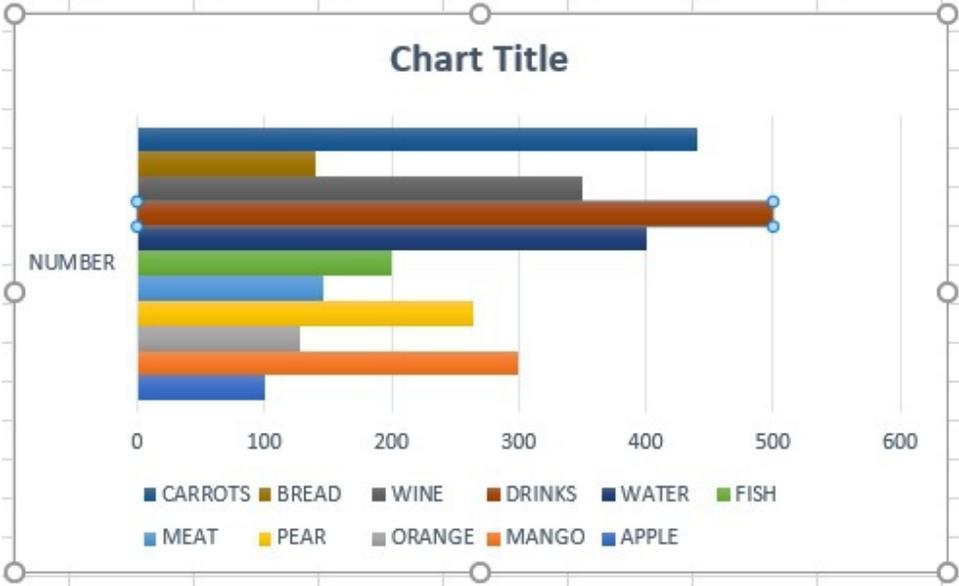


Fig 5.3: Created bar chart in Excel workbook

You can click the **Chart Title** part to add a title to the chart

Exercise on Bar Chart

Using the data below, create a bar chart in your Excel workbook

	A	B	C
1	NAMES	AGE	
2	RICHARD	24	
3	KELVIN	20	
4	BOB	28	
5	SMART	25	
6	MENDY	22	
7	HAT	23	
8	TIMO	27	
9	KANTE	31	

Fig 5.4: Data for bar chart exercise

HOW TO CREATE PIE CHART

A pie chart is defined as a circular statistical graphic, divided into slices to illustrate numerical proportion. It represents the percentage of each of the items in slices and all the items sum to 100%. I will be using the data I prepared in Fig 5 in Bar chart to create Pie chart.

To create a pie chart with that information, take these steps:

- Prepare the data
- Highlight the prepared data
- Click **Insert** tab
- In the **Chart** group, click **See All Charts** icon

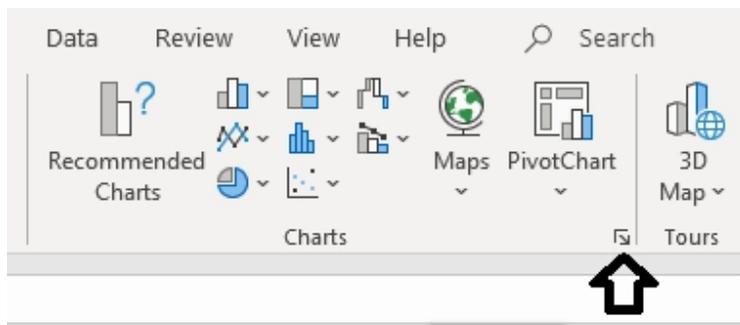


Fig 5.5: See All Charts icon pointed by the arrow

- In the Insert Chart dialog box that will appear, select **All Charts** heading
- Select **Pie** from the options
- Select any style of pie chart you want
- Click **Ok**

As you click the OK button, the Pie chart is inserted in the workbook

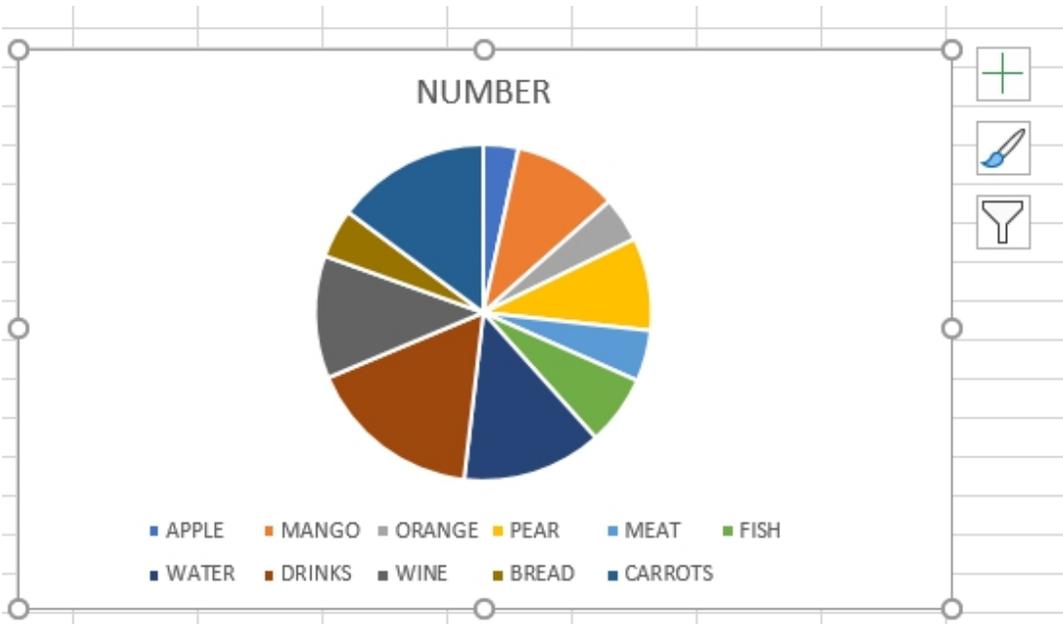


Fig 5.6: The created pie chart

You can click part of the chart labelled **NUMBER** to add title to the chart

Exercise on Pie Chart

Using the prepared data below, create a pie chart in your Excel workbook

	A	B	C	D	E
1			ITEMS	PERCENTAGE	
2			APPLE	16	
3			MANGO	6	
4			ORANGE	9	
5			PEAR	7	
6			MEAT	5	
7			FISH	8	
8			WATER	17	
9			DRINKS	11	
10			WINE	12	
11			BREAD	7	
12			CARROTS	2	
13					

Fig 5.7: Data for pie chart creation

More Information on Inserted Charts in Workbook

When you insert charts in a workbook, you will some symbols attached to the chart by the right-hand side. They are plus sign symbol (+), brush and Funnel symbol. I will explain what you can do with the symbols.

To hide, or format things like axis titles or data labels, click **Chart Elements** which is represented as cross sign.

To change the color or style of the chart, click the **Chart Styles** represented with brush.

To show or hide data in your chart, click **Chart Filters** which is represented with Funnel shape.

GUIDE ON INSERTING HISTOGRAM CHART IN A WORKBOOK

A histogram can be defined as a type of chart that group numbers into ranges. These are the steps to take to create a histogram:

- Prepare your data in the Excel workbook

C	D	E
STUDENTS	SCORES	
MIKE	70	
BEN	55	
RICHARCH	68	
SUNSHINE	56	
FRED	62	
TIMO	74	
TECK	68	
ALFRED	59	
RITA	65	
SAM	66	
REMY	64	

Fig 5.8: My prepared data for this teaching

- Highlight the prepared data
- Click **Insert** tab
- In the **Chart** group, click **See All Charts** icon
- Select **Histogram** from the options
- Select any style of the chart you want
- Click **Ok**

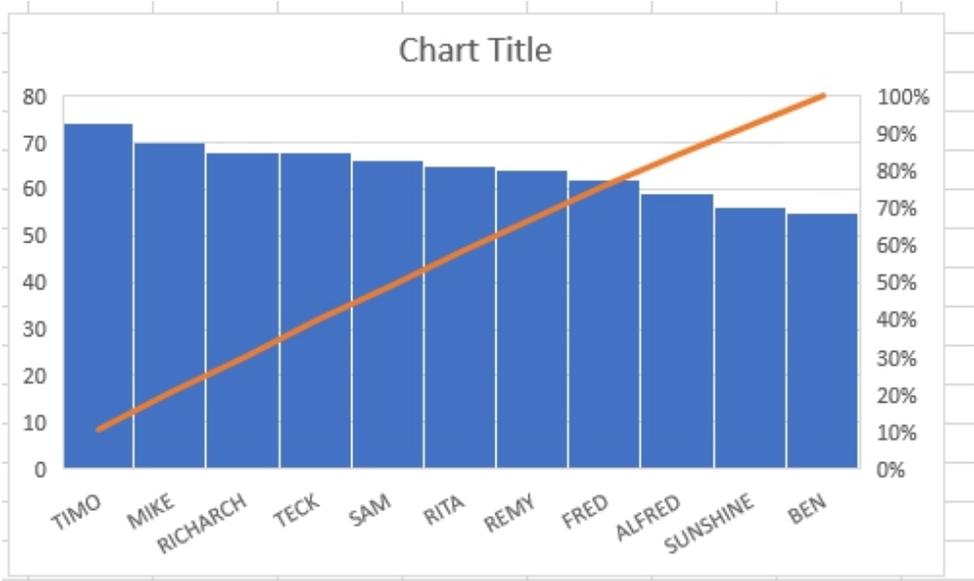


Fig 5.9: Created histogram chart

HOW TO CREATE MAP CHART

With Map Chart, you can easily represent different countries or locations in a chart in the form of map. Take for instance that I am a businessman that sale products in different countries in Europe and North America, I can represent the sales in the Map Chart. As of the time of publication of this book, the map chart feature was only available in Excel 365.

Step by Step Guide on How to represent Information in a Map Chart

To represent information in a map chart, take the following steps:

- Prepare your data in Excel spreadsheet

	A	B	C
1	COUNTRIES	SALES IN JANUARY 2020	
2	UNITED STATES	\$4000	
3	CANADA	\$1200	
4	UNITED KINGDOM	\$3500	
5	ITALY	\$800	
6	GERMANY	\$1500	
7	AUSTRIALIA	\$2500	
8	FRANCE	\$3165	
9	MEXICO	\$1800	
10	NETHERLANDS	\$2800	
11			

Fig 5.1.1: Prepared data for map chart

- Highlight the prepared data

Going with my own data, I will highlight from A1 down to B10 just as shown below:

	A	B	C
1	COUNTRIES	SALES IN JANUARY 2020	
2	UNITED STATES	\$4000	
3	CANADA	\$1200	
4	UNITED KINGDOM	\$3500	
5	ITALY	\$800	
6	GERMANY	\$1500	
7	AUSTRALIA	\$2500	
8	FRANCE	\$3165	
9	MEXICO	\$1800	
10	NETHERLANDS	\$2800	
11			

Fig 5.1.2: The selected data to be created in map chart

- Click **Insert** tab of Excel
- Click **Maps** which is under the **Charts** group
- Click the picture that will show up which looks like map

As you take the above step, immediately, the map chart will be inserted in your Excel spreadsheet. You can see how the one I created using the data I made in the picture below:

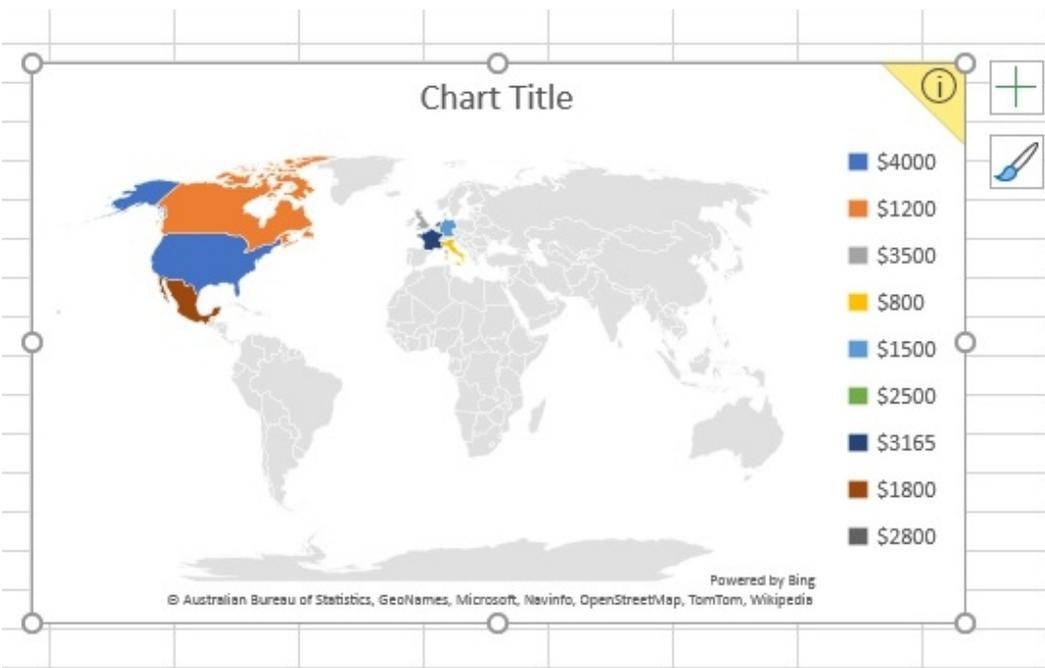


Fig 5.1.3: Already created map chart

After inserting the chart, if asked by the system that Bing will like to store the map chart and the information, just click the **Accept** button.

From the above picture, you can drag the chart to any part of the spreadsheet you want it to be. Also, you can click the **Chart Title** part of the map chart to give the chart any unique title of your choice. Going with my own data, I can give it the title **Sales in North America and Europe** .

Please know that to successfully create map chart, your computer must be connected to internet.

SCATTER CHART

When I was in secondary school, I was taught scatter chart by my then Mathematics teacher. Though the topic seemed difficult as of then, I still was able to do it. A scatter plot or chart is a type of chart using Cartesian coordinates to display values for typically two variables for a set of data. At the end of the representation of the values on the spreadsheet, each value appears as dots.

In this teaching, I will be representing the males and females in different schools in a location by number. This will make you understand my teaching properly. I will imagine different names of schools with the number of males and females in each of the classes and use that information to plot the scatter chart.

Guide on Potting of Scatter Chart

To create scatter chart in Excel spreadsheet, take the following steps:

- Compose/prepare your data properly in the Excel spreadsheet where you want to plot the scatter chart
- Highlight the prepared data
- Click the **Insert** tab
- Take your cursor to the chart part and locate the **Scatter chart** tool
- Click **Scatter chart**

Immediately you take this last step, the scatter chart is inserted in your spreadsheet. See the one I created using my prepared data:

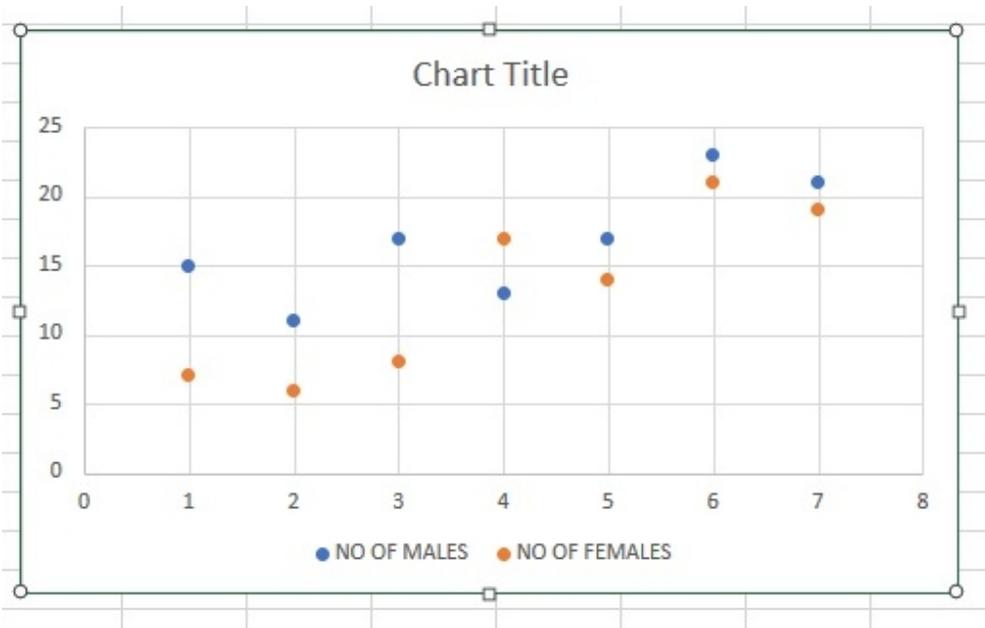


Fig 5.1.4: My prepared scatter chart

From the above, the blue colored dots stand for number of females while the orange stands for number of males.

RADAR CHART

A radar chart is a graphical method of displaying multivariate data in the form of a two-dimensional chart. The chart starts from a point. Also, the variables or simply put values are represented with two different colors.

If for instance I have data that contains number of males and females, when the numbers are represented in radar chart, the numbers of males are represented with different color as well as the number of females.

Radar chart is also known as spider, web, or star chart. Radar chart finds its application in the control of quality improvement to display the performance metrics of any ongoing program. Another application of this type of chart is in sports. It is used to chart the players strengths and weaknesses in each team.

STEP BY STEP GUIDE IN CREATING RADAR CHART IN EXCEL

Without taking any time, to create radar chart, take these steps:

- Prepare your data on Excel spreadsheet

	A	B	C
1	SCHOOLS	NO OF MALES	NO OF FEMALES
2	CALIFORNIA MIXED SCHOOL	15	7
3	EXCELLENT SMART SCHOOL	11	6
4	BRIGHT MEMORIAL SCHOOL	17	8
5	COMPREHENSIVE SCHOOL	13	17
6	TEXAS GREAT BRAINS	17	14
7	GRAMMAR MEMORIAL	23	21
8	ST. CHARLES COLLEGE	21	19
9			

Fig 5.1.5: Prepared data for radar

- Highlight the data you want to represent in radar chart
- Click the **Insert** tab of the Excel
- Located the radar chart command and click it to be inserted in your spreadsheet.

If you are using Excel 2019 or earlier, click the dropdown in the chart section under the **Insert** tab. If you make use of Excel 365, click the chart tool which will show **Insert Waterfall, Funnel, Stock, Surface, or Radar chart** when you take your cursor to it. From the list of the charts available there, select **Radar** . As you click **Radar** , the radar chart will be inserted in the spreadsheet just as shown in the picture below:

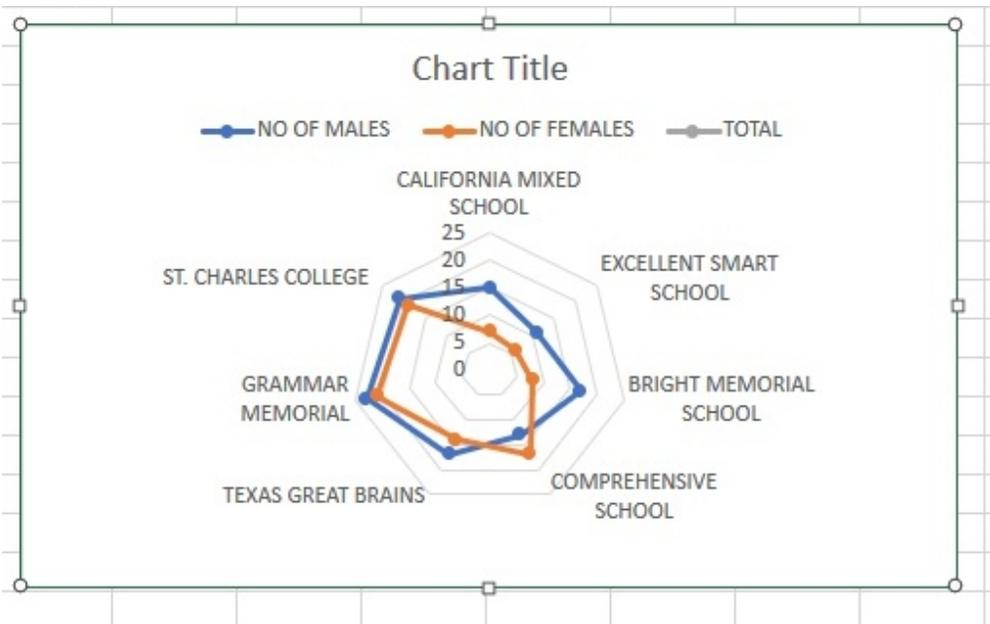


Fig 5.1.6: The radar chart
 You can click the **Chart Title** to add title to the radar chart.

WATERFALL CHART EXPLAINED

A waterfall chart is a data visualization chart that helps in understanding the cumulative effect of sequentially introduced positive or negative values. This kind of chart is also known as flying bricks, Mario or bridge chart. It is used in businesses to explain when there is gain or loss in the business.

Also, it is used by employers in some companies to explain when there is increase or decrease in their earnings. If there is increase in earnings, that will be positive but when there is decrease in earnings it becomes negative. Also, individuals that earn royalties from different companies use the waterfall chart to express their earnings per month. Any month they make more money than the previous month, it becomes positive while if there is drop in the earnings for the next month, you enter the data with negative sign to express drop in the royalty.

In waterfall chart, the first and the last columns represents the total values. Before I forget, know that waterfall chart is a column chart. What that implies is that the values represented in this kind of chart are in the columns of Excel spreadsheet.

Step by Step Guide on How to plot Waterfall Chart

To plot waterfall chart, do the following:

- Prepare your data in Excel spreadsheet

The first step to take is to prepare your data. I will use my own data to show example. It involves data of sales made in different months. Few of the months shows reduction in revenues as identified by (-) sign in the front of the number. That minus sign indicates decrease in sales revenue as compared with the previous month. The table prepared data is as shown in the picture below:

	A	B	C
1	MONTHS	ROYALTIES AND CHANGE	
2	JANUARY	4000	
3	FEBRUARY	1200	
4	MARCH	3500	
5	APRIL	-558	
6	MAY	1500	
7	JUNE	2500	
8	JULY	-600	
9	AUGUST	1800	
10	SEPTEMBER	2800	
11	OCTOBER	-770	
12	NOVEMBER	2000	
13	DECEMBER	3000	
14	TOTAL	20372	
15			

Fig 5.1.7: The prepared for waterfall chart

From the prepared data, APRIL, JULY, and OCTOBER has minus sign in front which means reduction in sales revenues for those months. When plotted in waterfall chart, those values appear in orange color or red by default. That different color differentiates the values from other positive values.

- Highlight the entire data you want to represent in the waterfall chart
- Click the **Insert** tab
- In the chart section of the **Insert** tab, locate the waterfall chart and click it

The values will be created in waterfall chart immediately you took the step above. See the one below in respect to my prepared data:

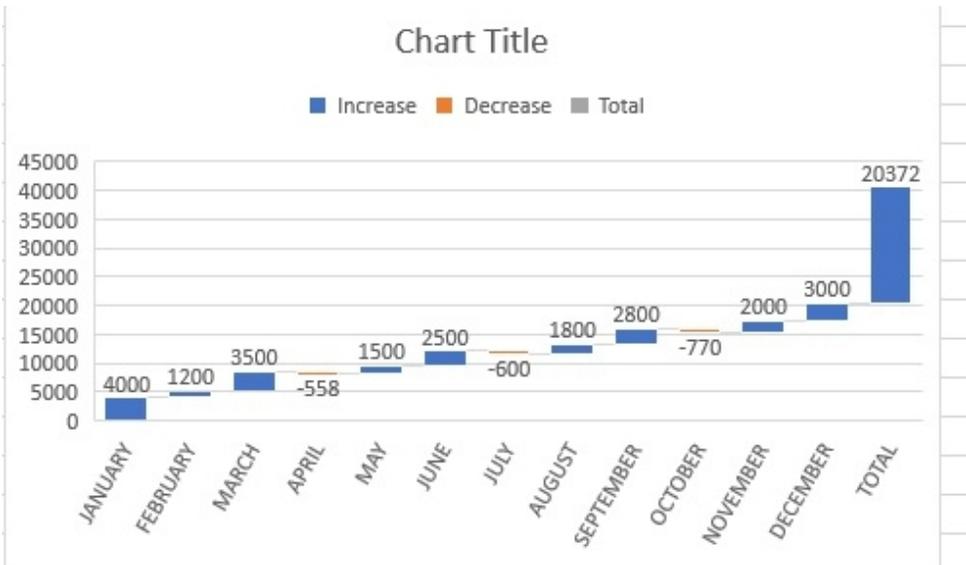


Fig 5.1.8: The waterfall chart

You can click the **Chart Title** to add title to your waterfall chart. When you click the chart after it is inserted, you will see a **plus-like** design at the right-hand side of the chart and a **brush-like** design. When you click the **plus-like** design which is known as **Chart Styles**, you will be shown some designs. You can click on any of them for it to be inserted in your chart. That will make your chart look beautiful just as shown in the picture below:

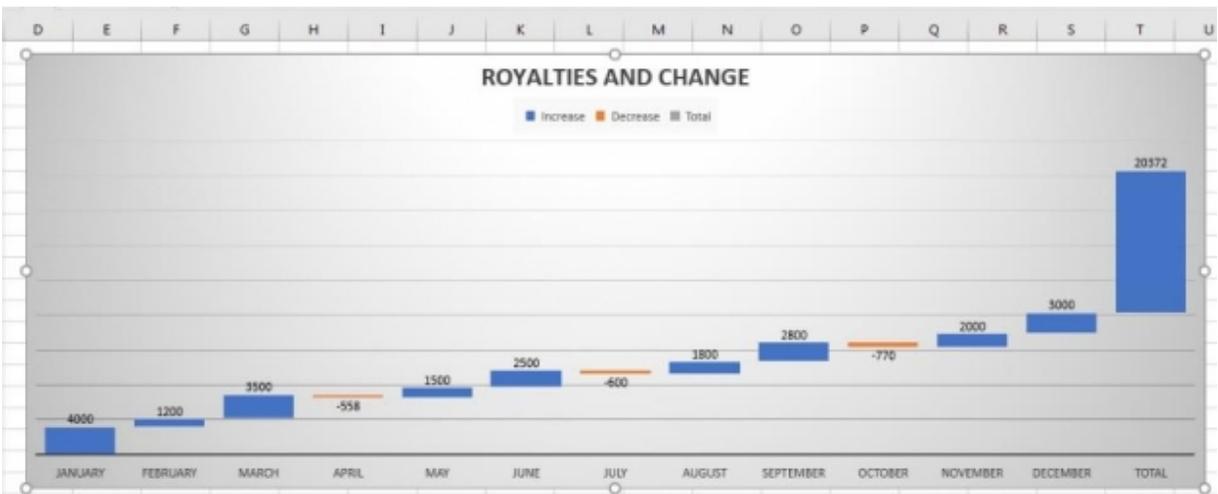


Fig 5.1.9: New waterfall chart design

CHAPTER 6

Up and Running with Formulas

Formulas are important in Excel. As a result of its importance, a separate tab was developed which Microsoft named Formulas. In this chapter, I will guide you on how to perform basic Mathematics task using formulas. There are many advanced Mathematics you can solve with the formulas available in the spreadsheet software but I will focus on the basics as this book is made for beginners.

UNDERSTANDING THE IMPORTANCE OF COLUMNS AND ROWS IN FORMULAS

In Excel workbook, the cells are formed by columns and rows. The columns are labelled with alphabets while the rows labelled with numbers. So, we put this into consideration to insert values in a particular cell to get the expected result.

Examples:

C1 : This implies the number is in column **C** row number **1**

E10 : This means the number is in column **E** row number **10**

F4 : This means the number is in column **F** row number **4**

K7 : This means the number is in column **K** row number **7**

With time you will see the practical illustration of my information. I will be using this approach to teach you.

USING BASIC OPERATORS IN EXCEL

The basic Mathematics operators in Mathematics are addition (+), subtraction (-), multiplication (*), and division (/).

With the prepare data below, I will guide you on how to solve problems with the basic operators:

	A	B	C
1	SCHOOLS	NO OF STUDENTS	
2	BRIGHT ACADEMY	87	
3	NEW YORK COLLEGE	80	
4			
5	ADDITION		
6	SUBTRACTION		
7	MULTIPLICATION		
8	DIVISION		
9			

Fig 6: Data to carryout addition (+), subtraction (-), multiplication (*), and division (/)

From that data, I will be working with the two values in cell B2 and B3. I will type my formulas in different cells where I want to have my result. For instance, during the addition, I will type in my formula for addition in cell B5. For subtraction, I will type the subtraction formula in cell B6 and so on. This is with respect to my prepared data and value positions.

ADDITION

To add numbers in Excel using formula, do the following:

- Click the cell where you want the numbers summed up to (referring to my data, I want the addition result in B5, so, I will click cell B5)
- Type the right addition formula in the cell. Using the data of Fig 6, I will type the formula:

=B2+B3

- Press **Enter** button of your computer keyboard

Immediately you press the **Enter** key, the sum of the numbers is added in the cell.

Another Approach to Sum Numbers in Excel (In-built Function)

There is another approach to add numbers in a workbook. The steps are as follow:

- Prepare your data
- Highlight the numbers you want to add
- Click **Formulas** tab
- Select **AutoSum** command and select **Sum**

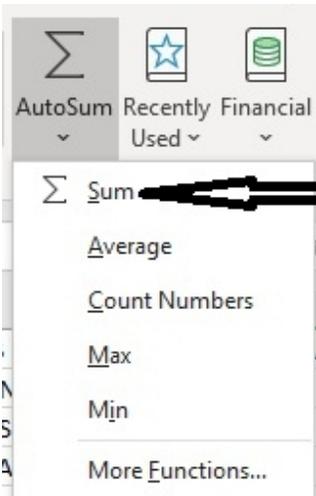


Fig 6.1: Options in **AutoSum**

SUBTRACTION

To subtract a number from another in workbook, do these:

- Prepare your data
- Select the cell where you want the result to be inserted
- Type the subtraction formula in the cell. Using the data of Fig 6, I want to subtract the number in B3 from B2, so I will type this formula in the cell where I want the result:

=B2-B3

- Press **Enter** button of your computer keyboard

Immediately you press the **Enter** key, the result of the subtraction is added in the cell.

MULTIPLICATION

To multiply values in a workbook, take these steps:

- Prepare your data
- Select the cell where you want the result of the multiplication inserted
- Type the multiplication formula in the cell. Using the data of Fig 6, if I want to multiply the number in B2 with B3, so I will type this formula:

=B2*B3

- Press **Enter** button of your computer keyboard

Immediately you press the **Enter** key, the result of the multiplication is displayed in the initially selected cell.

Division

If you want to divide values in workbook, take these steps:

- First prepare your data containing values as shown in Fig 6
- Select the cell where you want the result of the division appear
- Divide the values by typing the correct formula in the cell. If for instance I want to divide the value of B2 with B3 referencing to my prepared data, I have to type the formula in the cell:

=B2/B3

- Press the **Enter** key of your keyboard.

After all the calculations involving the basic operators, below is the picture showing all my results:

	A	B	C
1	SCHOOLS	NO OF STUDENTS	
2	BRIGHT ACADEMY	87	
3	NEW YORK COLLEGE	80	
4			
5	ADDITION	167	
6	SUBTRACTION	7	
7	MULTIPLICATION	6960	
8	DIVISION	1.0875	
9			

Fig 6.2: Results of using basic operation formulas in a workbook

FINDING AVERAGE, MINIMUM AND MAXIMUM VALUES

This is a new section in Formula chapter where I will guide you on finding average of numbers, minimum and maximum numbers in Excel workbook by using the suitable built-in functions. They are simple tasks to carry out.

I will be using the data I prepared in my workbook below to guide you through:

	A	B	C
1	ITEMS	AMOUNT IN USD	
2	MEAT	2000	
3	FISH	5000	
4	APPLES	6500	
5	MANGOES	5900	
6	ORANGES	2000	
7	PEARS	3300	
8	VEGETABLES	8000	
9	SPICES	1500	
10	BREAD	4200	
11			

Fig 6.3: Prepared data

Guide on Finding Average of Numbers in a Workbook

Take these steps to find the average of numbers in as spreadsheet:

- Prepare your data just like the one I have in Fig 6.3
- Highlight the cells that have the numbers you want to find their average. Example is the numbers I highlighted as shown in my picture below:

	A	B	C
1	ITEMS	AMOUNT IN USD	
2	MEAT	2000	
3	FISH	5000	
4	APPLES	6500	
5	MANGOES	5900	
6	ORANGES	2000	
7	PEARS	3300	
8	VEGETABLES	8000	
9	SPICES	1500	
10	BREAD	4200	

Fig 6.4: Highlighted numbers

- Click the **Formulas** tab

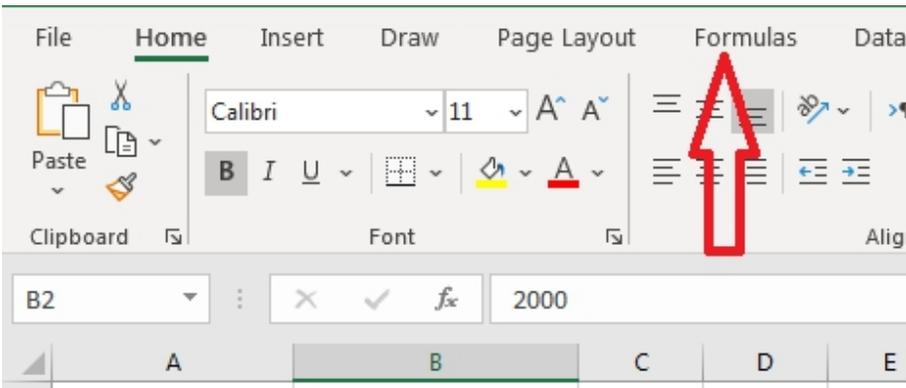


Fig 6.5: **Formulas** tab pointed by the arrow

- Click **AutoSum** command select **Average**

The average value is inserted automatically in a cell below once you take the last step

Finding Minimum Value

To find the minimum value among the series of numbers in a sheet, take these steps:

- Prepare your data just like the one I have in Fig 6.3
- Highlight the cells that have the numbers you want to find the minimum number from
- Click the **Formulas** tab

- Click **AutoSum** command select **Min**

As you do that, the minimum value will be inserted in cell of the workbook.

Finding Maximum Value

If you want to know the maximum number in a series of numbers in Excel workbook with the assumption that the data has been prepared already, take these steps:

- Highlight the cells that have the numbers you want to find the maximum number from
- Click the **Formulas** tab
- Click **AutoSum** command select **Max**

USING FUNCTIONS

You may wonder what a function means in Excel. In Excel, a function is a predefined formula that performs calculations using specific values in a particular order. I will teach you on few among many functions you can use to complete certain tasks.

Function for Date

You can use function to insert today's date in cells. Maybe you are compiling information in a workbook and you forget the date of that day, there is function you will type in the cell and the date displayed in the cell.

To insert today's date in a cell using function, click the cell where you want the date inserted. The next step is to type **=TODAY()** and press Enter key. As you do that, today's date is inserted in the cell.

Sometimes as you are typing in the cell, the Excel system makes suggestion for you, just click the right suggestion and the job is made easy for you.

Count Function

You can use count function to find out the number of cells that contain figures. Count function does not work on texts. It is a function that depend on numbers. I will use the data I have in the picture below to explain count function to you:

<i>fx</i>			
▲		C	D
1		TEST3	
2		50	
3		25	
4		42	
5		2	
6		44	
7		LEARN	
8		FOOD	
9		46	
10		hope	
11		Get it	
12		6	
13		7	
14			

Fig 6.6: Data for count function explanation

In the picture above, column C is made of mixture of both numbers and words. If I want to find out the number of cells in that column that contains numbers, I have to take these steps:

- Click a cell where I want the count function inserted, maybe C14
- Type `=COUNT(C2:C13)` in the cell C14

What that implies is that am telling Excel system to count number of cells from C2 to C13 that are having figures in them

- Press **Enter** key

Once I press the Enter key, the number of cells with numeric figures is immediately recorded in cell C14 which is where I want the value recorded.

CHAPTER 7

Working with Excel in Phones

As I stated at the beginning of this book, you can easily work with Excel application you installed in your Android or iPhone on the go. Take for example that after you created spreadsheet file through your computer and saved it in your OneDrive account or you saved it in your Email, you can easily download it from any of the two channels and make any changes you want in the file and save again.

Also, when your PC is not close to you and you want to create Excel file quickly, you can use the Microsoft Excel application in your Android or iPhone to do so. The application is simple to work with and it makes things easy for us. Though there are few limitations to this application when in phones, but it is helpful.

I have taught you how you can download Excel application for mobile phones either from Play store or App store for iPhone users. I will walk you through on how to use Excel in your smart phones with respect to Android devices. Just follow the guide and you will learn something unique.

OPENING EXCEL APP IN YOUR SMART PHONE

The same way you open other applications in your smartphone is what you are to apply to comfortably open Excel application in your phone.

To open Excel app, take these steps:

- Power on your smart phone
- Locate the application in your phone
- Tap the application once and it opens

CREATING YOUR FIRST EXCEL DOCUMENT VIA MOBILE APPLICATION

As a beginner in the use of Excel mobile application, you may find it difficult on where to tap to open a new blank workbook just as you do in the desktop application. I will guide you through on how you can do that without any stress.

To open a new Excel workbook using your Excel mobile application, take these steps:

- Tap your Excel mobile app for it to open
- Tap the plus sign (+) situated at the top right hand side of the app interface which is shown below:

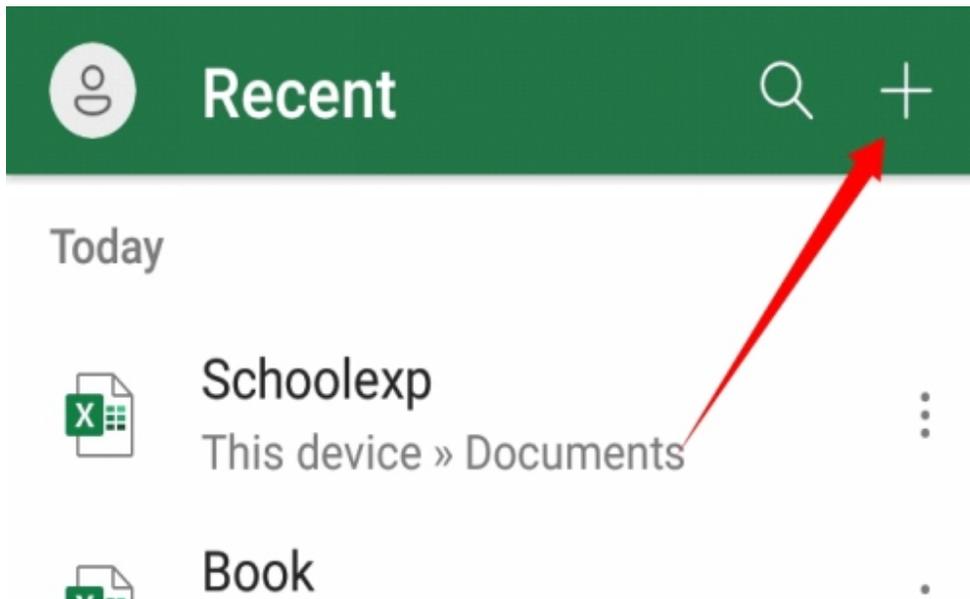


Fig 7: Tap the + sign shown by the arrow

- As next page opens, tap **Blank workbook** for a workbook to be opened for you

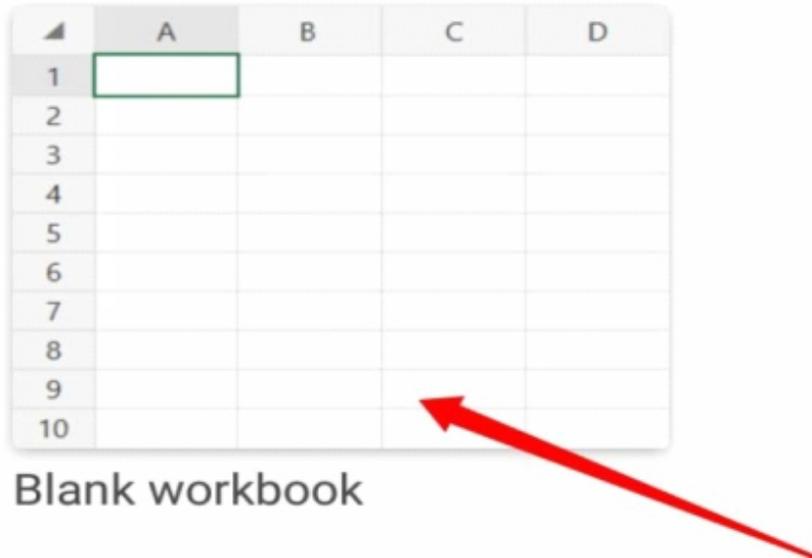


Fig 7.1: Tap the **Blank workbook**

- Start entering the data you want to build as the workbook opens

Entering Texts in Excel for Smart Phones

To enter text in the cells of Excel for smart phones, take these steps

- Double-tap the cell where you want to enter the text or number
- Start typing your texts
- Tap on another cell when you are done with typing and that is all

Making Text and Numbers Bold

To bold any content you have in the cell of Excel Android app, do these:

- Tap the cell containing the text or number once
- Tap the dropdown by the bottom right-hand side of the interface to see some tools

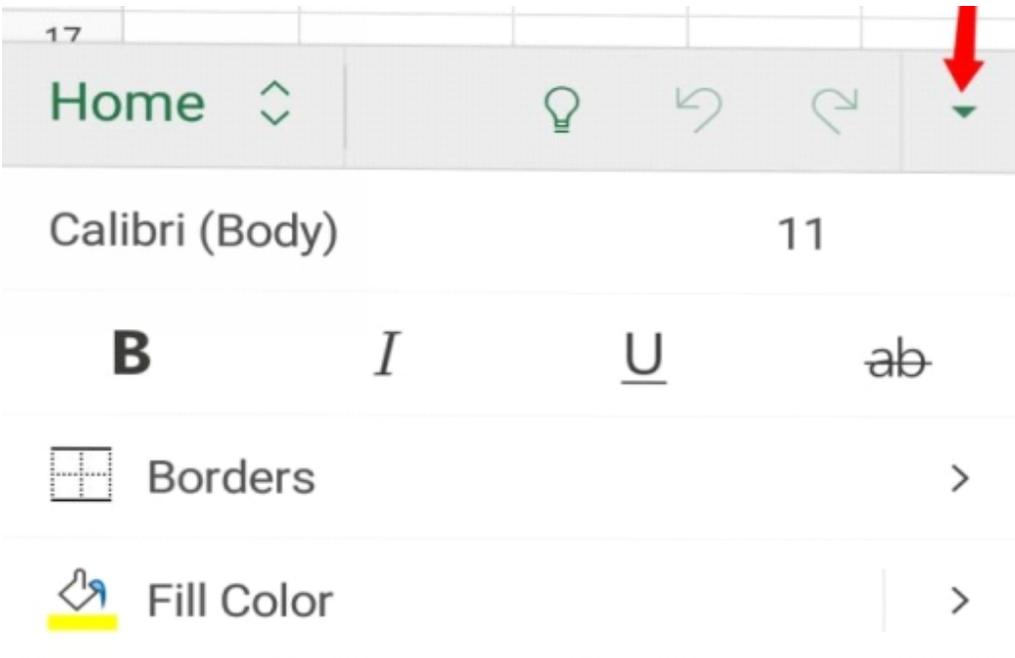


Fig 7.2: Where to tap to see tools

- Choose **Home** tab from the left but it is already selected by default and because of that can jump this step

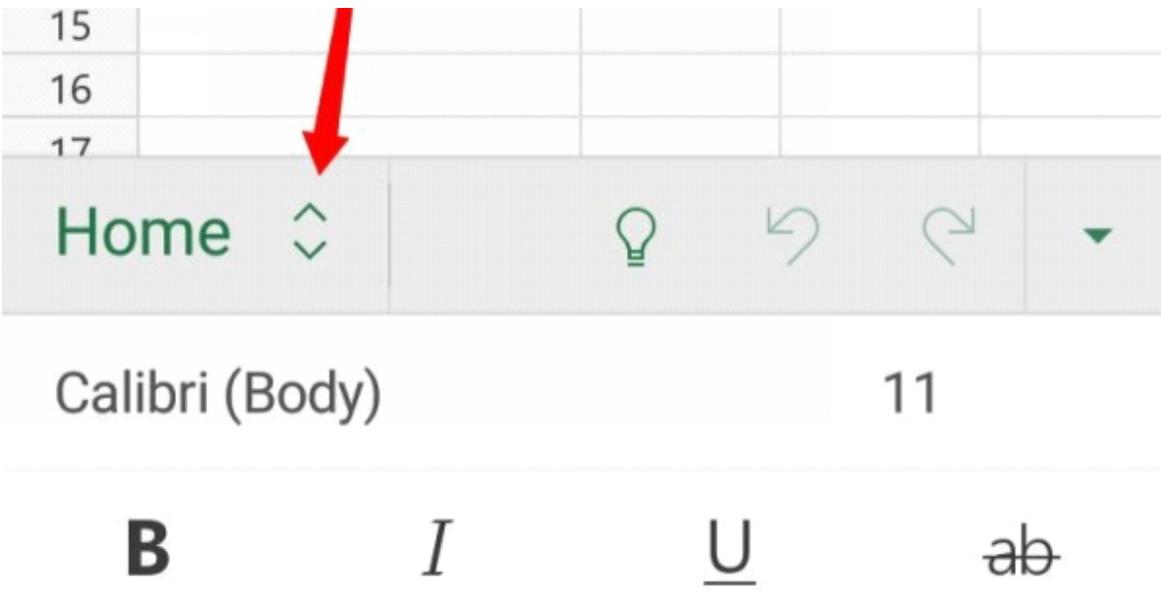


Fig 7.3: The tab selection dropdown

- Tap the **Bold** tool for the text or number in the cell to be made bold

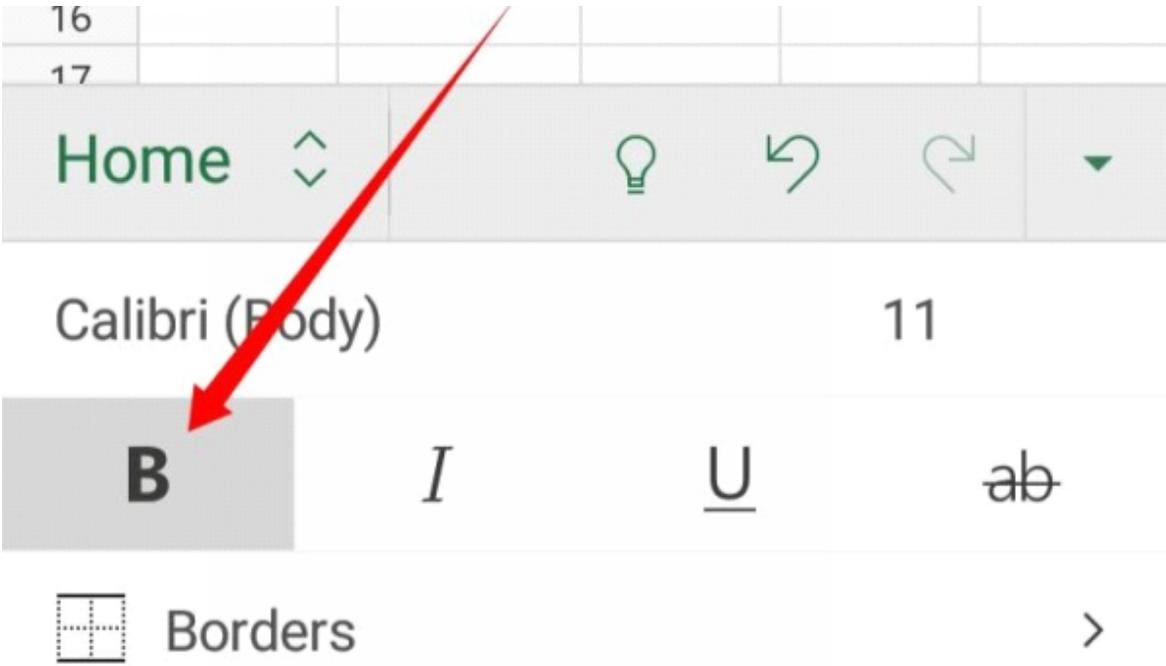


Fig 7.4: The text became bold when the bold tool was tapped

SELECTING TABS IN EXCEL FOR SMART PHONES

With the knowledge you gained from my teaching on Excel for from chapter 1 to 6, I know you have learned a lot. You may like to use the same guide to perform certain tasks on Excel using the Android app but may not know how to go about it. That is the reason I want to teach you how to select different tabs in Excel mobile application.

To Select any tab in Excel using your Excel Android app, take these steps:

- As you tap the app and it opens, tap the dropdown by the bottom right-hand side of the interface



Fig 7.5: Tap the place pointed at by the arrow

- Tap the **Tab selection** dropdown by the left-hand corner, and choose any tab of your choice

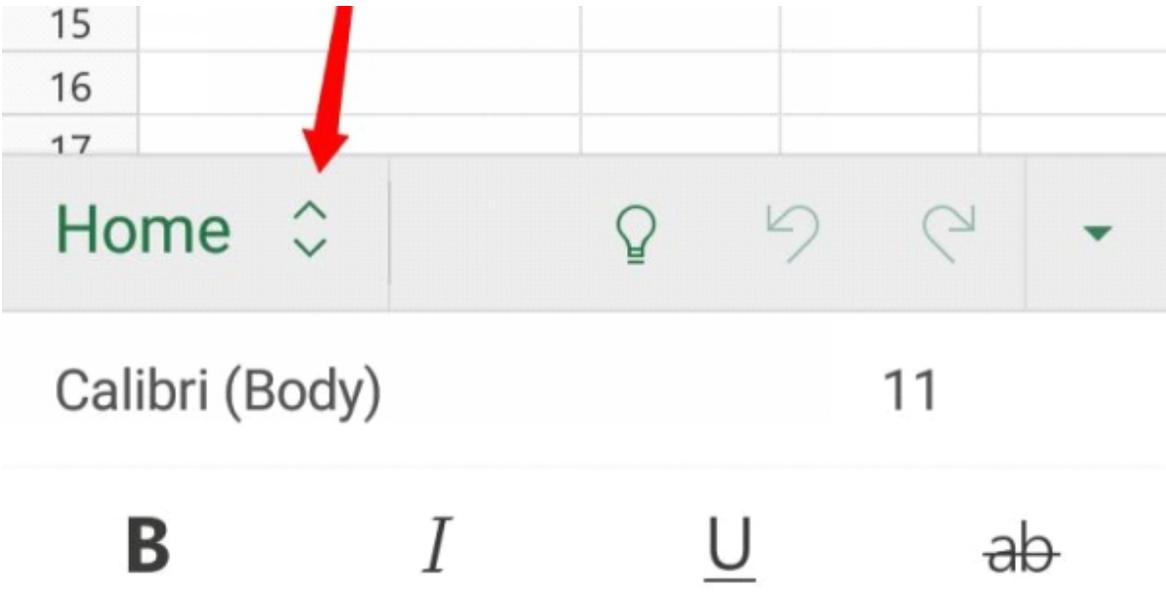


Fig 7.6: The tab selection dropdown pointed by the arrow

As you take this last step, you will be shown the tabs in Excel from which you can choose any one to complete any specific task.

HOW TO CHANGE ROW AND COLUMN SIZE IN EXCEL MOBILE APP

When I was a beginner in the use of Excel Android app, I found it difficult to change the size of cells. But today, I can comfortably do that. In Android app, you need to select the adequate Excel tool, and enter the values you want to get the size you want. You can keep changing the values until the text you entered in the cell are seen clearly which is the reason you want to change the cell size.

To change column and row sizes in Excel spreadsheet for Android application, take these steps:

- Tap any cell which you want to adjust its size
- Tap the dropdown by the bottom right-hand side of the Excel interface to show some tools
- Select **Home** tab from **Tab selection** dropdown by the left-hand corner
- Scroll down until you get to the **Format Cell Size**

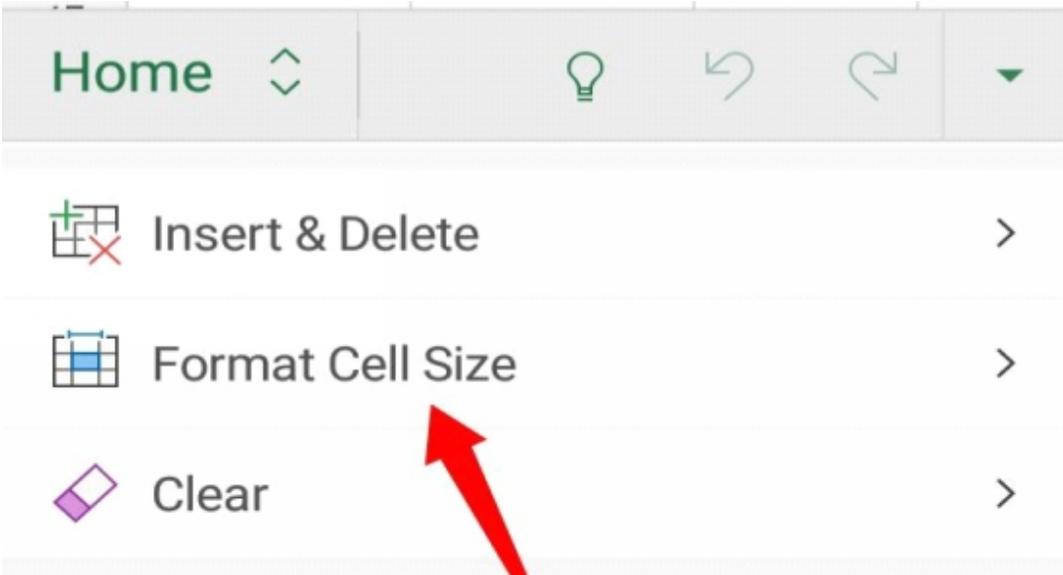


Fig 7.7: Format Cell Size tool shown by the arrow

- Click the **Format Cell Size** tool
- From the space that will be shown to you, type the row height and the Column width you want the cells to have or you can make change in one of the parameters if that is what you want



Fig7.8: Enter your values in the boxes

- Tap the **Enter** button of your phone

INSERTING PICTURE IN WORKBOOK USING EXCEL MOBILE APP

With the Excel mobile App, you can easily insert pictures in the workbook. Maybe you want to illustration something in the workbook, the need for the picture may arise.

To insert picture in Excel workbook using your Excel mobile application, take these steps:

- Tap any cell in your Workbook
- Tap the dropdown by the bottom right-hand side of the Excel interface to show some tools

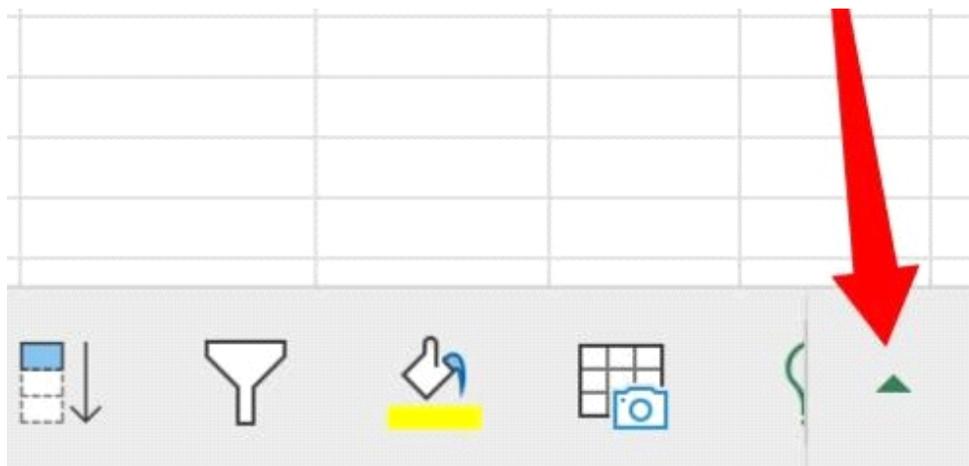


Fig 7.9: Tap the spot shown by the arrow

- Tap the **Tab selection** dropdown by the left-hand corner
- Select **Insert** tab as shown below:

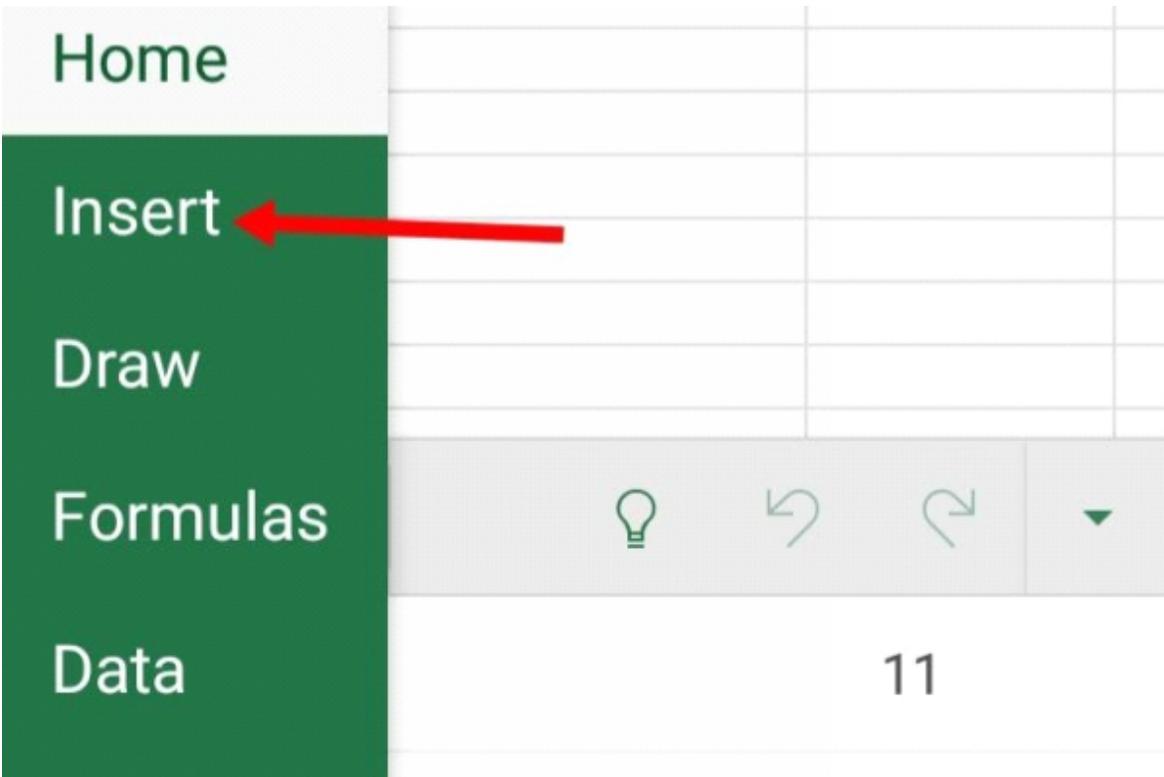


Fig 7.1.1: Selecting the **Insert** tab

- As you select the **Insert** tab, you will be shown some tools under it

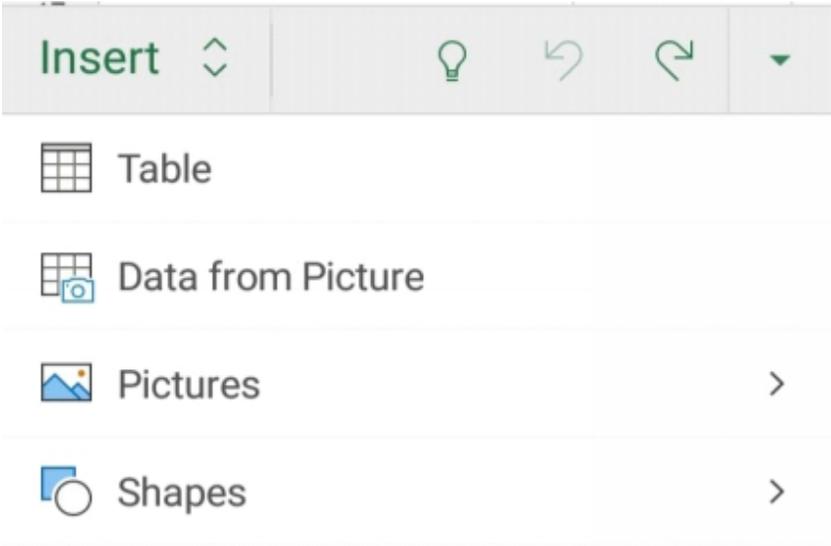


Fig 7.1.2: The commands under **Insert** tab

- Tap **Picture** tool, and select the picture you want to upload into your Workbook

IS IT POSSIBLE TO CREATE CHART USING EXCEL MOBILE APP?

The answer is yes. Because chart tool is available in Excel mobile application which can be for Android phones or iOS devices, you can create chart in the workbook. I will walk you through on how you can do that.

Chart Insertion Using Excel Mobile Application

In this heading, I will be teaching you on how to create chart in Excel workbook using your Excel Android app. To do so, take these steps:

- Prepare the data you want to have in the chart

Example of a prepared data is the one below:

	A	B
1	PHONES	PRICE IN DOLLARS
2	ULEFONE	159
3	SAMSUNG GALAXY	219
4	BLU G90	149
5	MOTO G POWER	219
6	NOKIA 1.3	99
7	BLU STUDIO	69
8	ONEPLUS 8 PRO	799
9		

Fig 7.1.3: My prepared data for bar chart

From the above data, I listed Android phones and their individual costs in market. I will create chart showing the items and their individual costs.

HOW TO CREATE BAR CHART USING EXCEL ANDROID APP

To complete the task of creating bar chart using your Excel mobile app, take these steps:

- Tap a cell containing data or highlight the entire prepared data
- Tap the dropdown by the bottom right-hand side of the Excel interface to show some tools
- Tap the **Tab selection** dropdown by the left-hand corner
- Select **Insert** tab
- Scroll down the tools available in the Insert tab and select **Chart** as shown below:

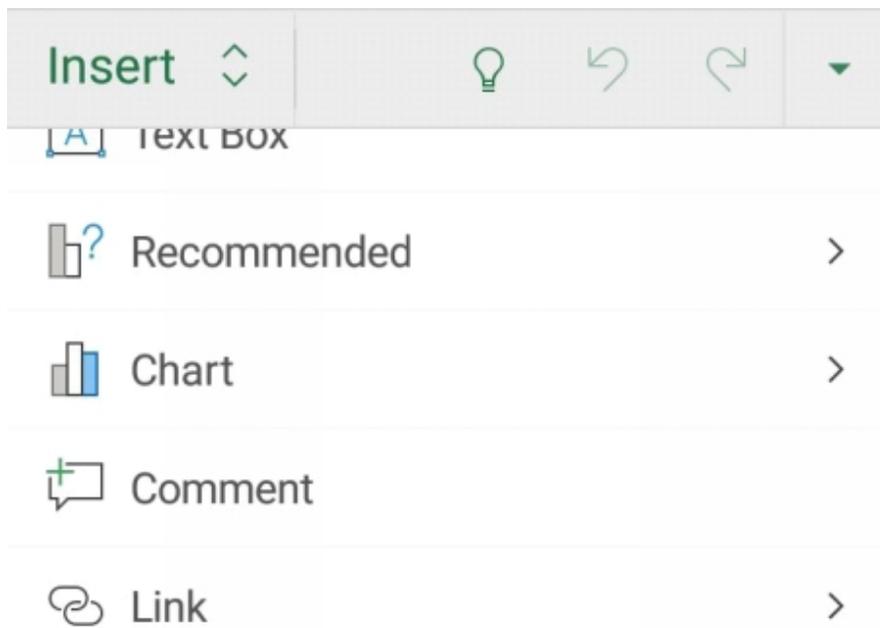


Fig 7.1.4: Tap **Chart** from the options

- Select the type of chart you want to create

In this teaching, I want to create bar chart, so I will tap **Bar** chart

- Select the chart style you want to have

Immediately you take the above step, the chart will be inserted in the workbook just as I have below:



Fig 7.1.5: A complete created bar chart

HOW TO ADD SHEETS IN WORKBOOK USING EXCEL MOBILE APPLICATION

Adding sheets in a workbook using Excel application in smart phones is an easy task to complete. Once you understood that which I taught you for Excel computer application, you can do the one for smart phones.

Without taking much of your time, to add new spreadsheets, take these steps:

- Open your Excel mobile App
- Look at the bottom part of the workbook interface
- Tap the plus sign (+)



Fig 7.1.6: Where to tap for a new sheet to be added

- A new sheet is added

SHARING EXCEL FILE THROUGH MOBILE APP

I have taught you how you can share Excel file through Excel desktop application. Here I will be teaching you on how you can share your Excel file through the mobile app. The two channels follow similar steps.

To share your Excel file after you are done preparing your file, take these steps:

- Tap the **share icon** at the top right-hand corner of the Excel interface as shown below:

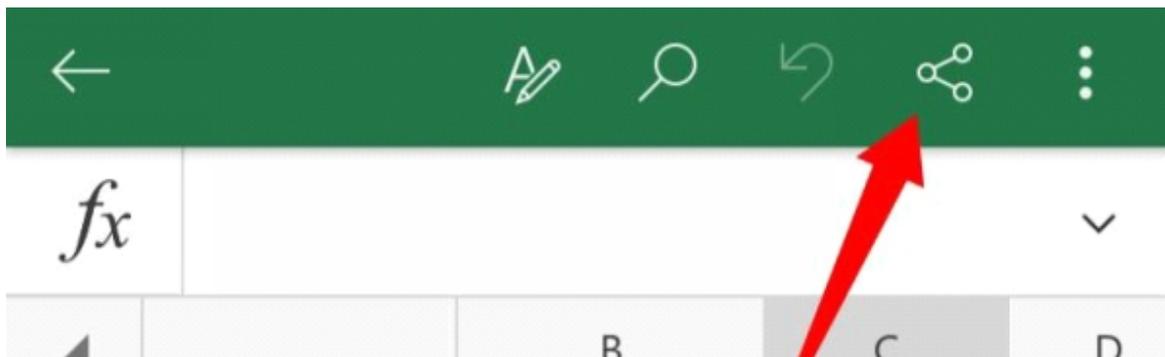


Fig 7.1.7: The share icon shown by the arrow

- Select whether to share your file through **OneDrive** or **Share as attachment** to others by email

When you select to share using OneDrive, you can easily collaborate with other people. You can type the email addresses of the people you want to share with and send it. Also, you can get link which you can share with people by sending it out to their phone contact numbers and sharing with them through social media channels like Facebook and WhatsApp. Remember that OneDrive is a cloud storage developed by Microsoft.

When you choose the option to **Share as attachment**, a space will be provided for you to enter the email addresses of the people you want to send the Excel file to. Just enter their email addresses or just an email of you are sending to one person and then send the file.

SAVING EXCEL DOCUMENT THROUGH MOBILE APPLICATION

This is another area of importance I will teach you. By default, automatic saving of Excel file is enabled in Excel App for smart Phones. So, you may not necessarily need to do anything. But if you want to save manually, thereby giving the file a unique name, take these steps:

- Tap the ellipsis (the three dots arranged vertically) at the top right-hand corner of the workbook interface

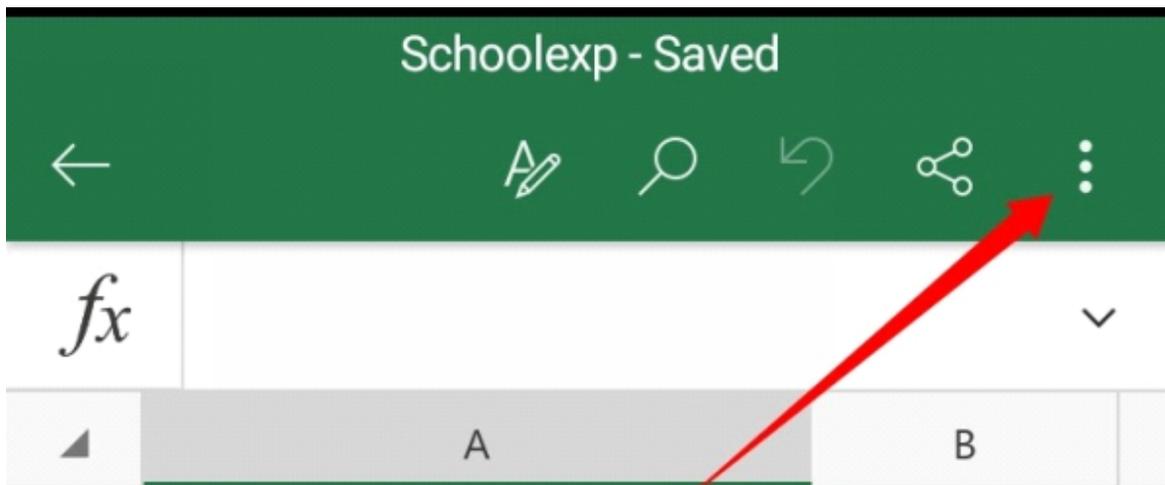


Fig 7.1.8: The ellipsis is shown by the arrow

- Tap **Save As** among the options
- Type the name you want the Excel file to bear in the space provided
- Tap anywhere you want to save your file; you can choose to save in your phone which is referred to as **This device** or choose to save in your **OneDrive** account

- Tap **Save** button

This is where I will stop my teaching on Excel mobile application. I have taught you how to choose Excel tabs and other areas. With the knowledge you gained in the desktop application teaching, you can apply same steps to get some tasks completed when working with the mobile app version. I believe you gained good knowledge through my teaching.

APPRECIATION

Thanks for Reading