CCA-101: Fundamentals of IT & Programming

Assignment -1

Q1: What are the four fundamental parts of computer? Explain it with the help of diagram.

Ans. **Computer Block Diagram System**: Mainly computer system consists of three parts, that are central processing unit (CPU), Input Devices, and Output Devices. The Central Processing Unit (CPU) is divided into two parts again: arithmetic logic unit (ALU) and the control unit (CU). The set of instruction is in the form of raw data.
A large amount of data is stored in the computer memory with the help of primary and secondary storage devices. The CPU is like the heart/brain of the computer. The user does not get the desired output, without the necessary option taken by the CPU. The Central processing unit (CPU) is responsible for the processing of all the instructions which are given by the user to the computer system.

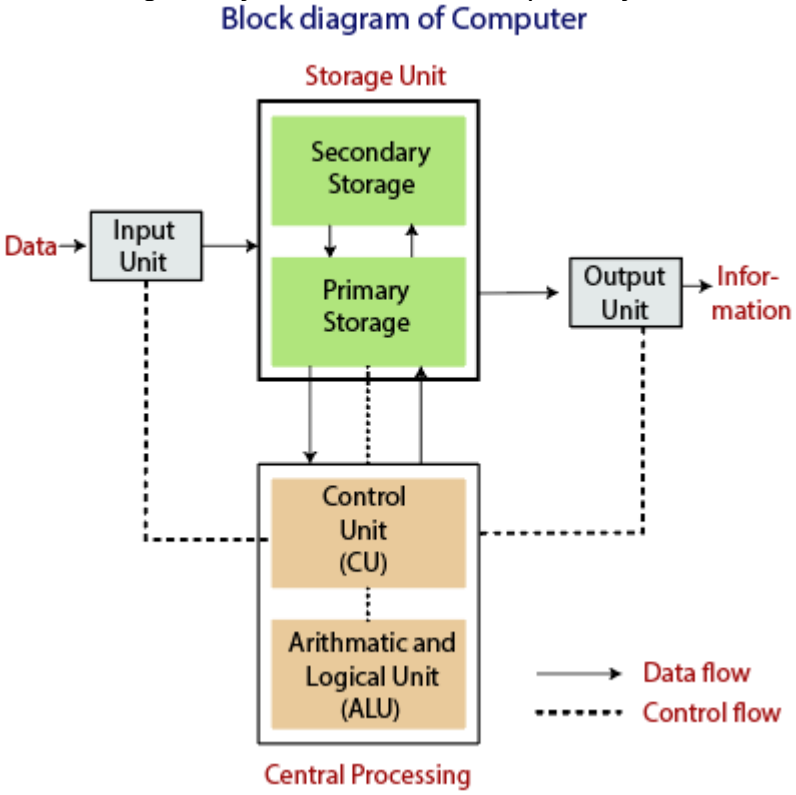


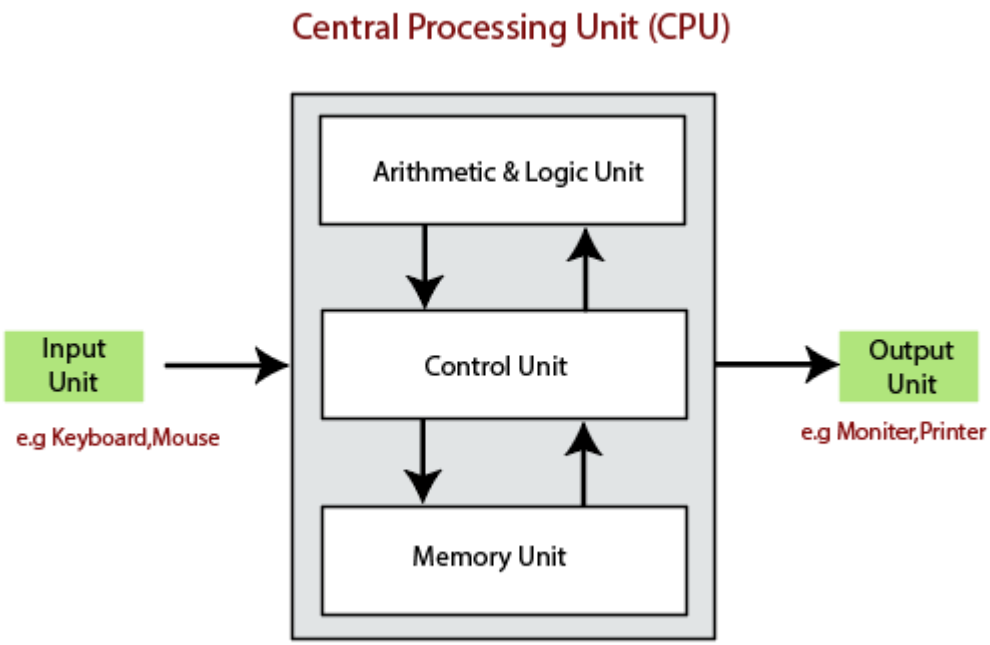
Fig: Block Diagram of the computer.

The data is entered through input devices such as the keyboard, mouse, etc. This set of instruction is processed by the CPU after getting the input by the user, and then the computer system produces the output. The computer can show the output with the help of output devices to the user, such as monitor, printer, etc.

- CPU (Central Processing Unit)
- Storage Unit
- ALU(Arithmetic Logic Unit)
- Control Unit

Central Processing Unit (CPU)

The computer system is nothing without the Central processing Unit so, it is also known as the brain or heat of computer. The CPU is an electronic hardware device which can perform different types of operations such as arithmetic and logical operation.



The CPU contains two parts: the arithmetic logic unit and control unit. We have discussed briefly the arithmetic unit, logical unit, and control unit which are given below:

Control Unit

The control unit (CU) controls all the activities or operations which are performed inside the computer system. It receives instructions or information directly from the main memory of the computer.

When the control unit receives an instruction set or information, it converts the instruction set to control signals then; these signals are sent to the central processor for further processing. The control unit understands which operation to execute, accurately, and in which order.

Arithmetic and Logical Unit

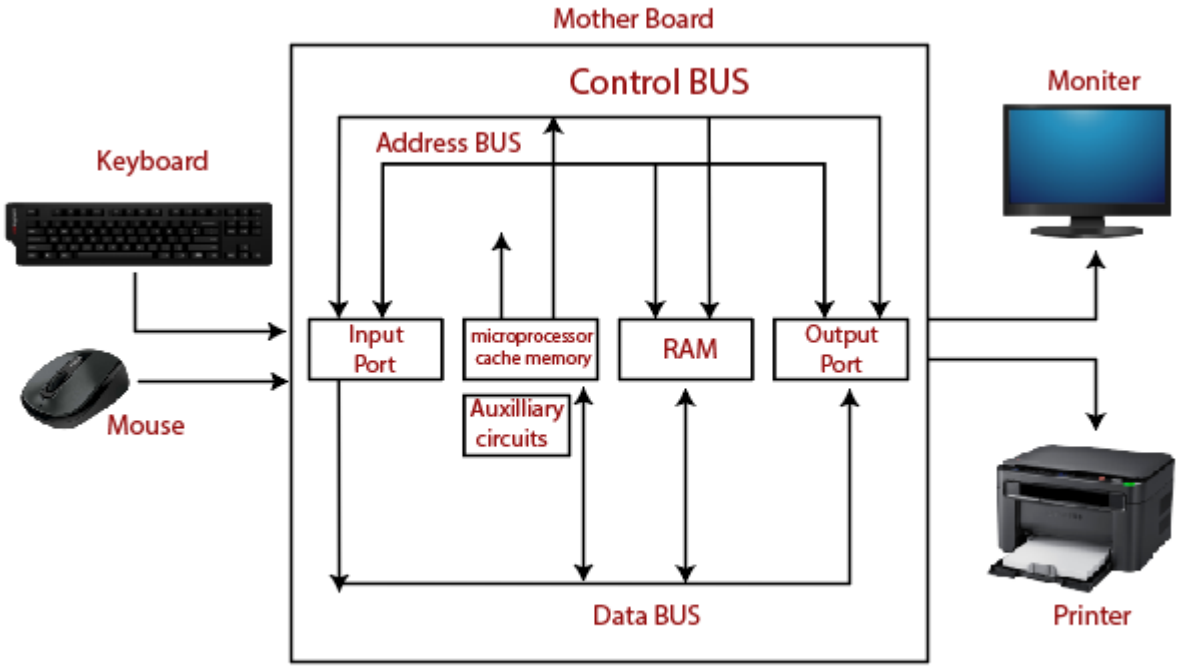
The arithmetic and logical unit is the combinational digital electronic circuit that can perform arithmetic operations on integer binary numbers.It presents the arithmetic and logical operation. The outputs of ALU will change asynchronously in response to the input. The basic arithmetic and bitwise logic functions are supported by ALU.

Storage Unit

The information or set of guidelines are stored in the storage unit of the computer system. The storage unit provides the space to store the data or instruction of processed data. The information or data is saved or hold in computer memory or storage device. The data storage is the core function and fundamental of the computer components.

Components of Computer System

The hardware and software exist on the computer**.** The information which is stored through the device is known as computer software. The hardware components of the computer system are related to electronic and mechanical parts, and the software component is related to data and computer programs. Many elements are connected to the main circuit board of the computer system called a “motherboard.”



Components of a Computer System

- Processor.
- Main Memory.
- Secondary Memory.
- Input Devices.
- Output Devices.

These are mainly five components of the computer system. The computer hardware, computer software, and liveware exist in the element of the computer system.

Processor

The processor is an electric circuitry within the computer system. The Central processing unit is the central processor or main processor of the computer system. The processor carries out the instructions of the computer program with the help of basic arithmetic and logic, input/output operations.

Main Memory

The Random Access Memory is the main memory of the computer system, which is known as RAM. The main memory can store the operating system software, application software, and other information. The Ram is one of the fastest memory, and it allows the data to be readable and writeable.

Secondary memory

We can store the data and programs on a long-term basis in the secondary memory. The hard disks and the optical disks are the common secondary devices. It is slow and cheap memory as compare to primary memory. This memory is not connected to the processor directly.

It has a large capacity to store the data. The hard disk has a capacity of 500 gigabytes. The data and programs on the hard disk are organized into files, and the file is the collection of data on the disk. The secondary storage is direct access by the CPU; that's why it is different from the primary storage.

The hard disk is about 100 times the capacity of the main memory. The main difference between primary and secondary storage is speed and capacity. There are several large blocks of data which are copied from the hard disk into the main memory.

Input Devices

The user provides the set of instruction or information to the computer system with the help of input devices such as the keyboard, mouse, scanner, etc. The data representation to the computer system is in the form of binary language after that the processor processes the converted data. The input unit implements the data which is instructed by the user to the system.

We can enter the data from the outside world into the primary storage as the input through input devices. The input devices are the medium of communication between the outside world and the computer system.

There are some important features of input devices which are given below:

1. The input devices receive or accept the data or instruction from the user, who exist in the outside world.
2. These devices convert the data or instruction into the machine-readable form for further processing.
3. The input device performs like the connection between the outside world and our computer system.
4. The keyboard and mouse are common examples of input devices.
5. When the whole procedure is finished, we get the desired output from the output devices such as monitor, printer, etc.

Output Devices

The output devices produce or generate the desired result according to our input, such as a printer, monitor, etc. These devices convert the data into a human-readable form from binary code.

The computer system is linked or connected to the outside world with the help of output devices. The primary examples of output devices are a printer, projector, etc.

These devices have various features which are given below:

1. These devices receive or accept the data in the binary form.
2. The output devices convert the binary code into the human-readable form.
3. These devices produce the converted result and show to the user.

Q2: Discuss about the classification of computers based on size and capacity.

Ans. **Classification of Computer Based on Size and Capability**

Introduction

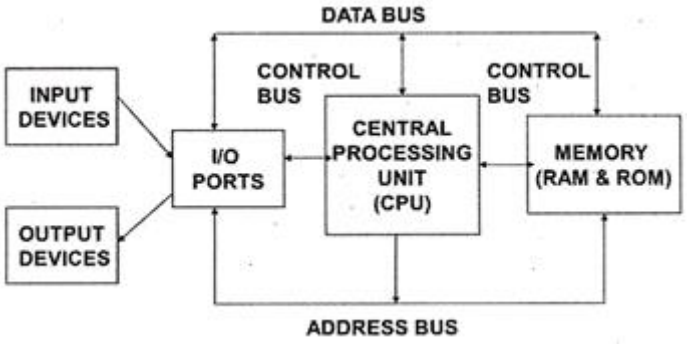
Classification of computers are based on their architecture, speed of executing commands or instructions, peripheral used and also their uses. Microcomputers are usually used in home and offices and only a single user can perform the task using a microcomputer. Its storage and data handling capacity are limited as per the requirement for home and office work. The another type of computer is called minicomputer which has usually larger storage and can handle multiuser at a time. This chapter includes the classification of computers.

Computer's Classification

Computers are classified on different parameters, such as, storage capacity, processing speed and component (CPU) used in computers. Depending upon the components used and features of different computers, they are classified into four groups, Microcomputers, Minicomputers, Mainframe computers and Supercomputers.

Micro Computers

Micro Computer is a computer whose CPU (Central Processing Unit) is a microprocessor. All the components of a microprocessor are on a single integrated circuit chip. Micro computer can be categorized as the desktop, programmable and workstation. The microprocessor based computers are called third generation computers. They are the backbone of the modern computer era. The first and second generation computers are based on vacuum tubes and bipolar junction transistors.



Desktop Computers

Desktop computer is a type of microcomputer. A desktop computer has a keyboard for input data, a LCD or CRT monitor to display information and Central processing unit tower contains

storage, memory, different types of drives, such as, CD drive, hard drive, etc. A desktop computer is mainly used at home and office applications.

Programmable Computers (PDA)

Personal digital assistance is a type of hand held programmable digital computer. It is used as notepads, address books and can connect to world web wave to share information. A PDA is equipped with mobile phone hence, called smallest computer.

Workstation

A workstation computer has greater memory capability and more extensive mathematical abilities. It is connected with other workstation computers or personal computer to exchange data and mostly used for scientific applications. It also supports multitasking applications.

Mini Computers

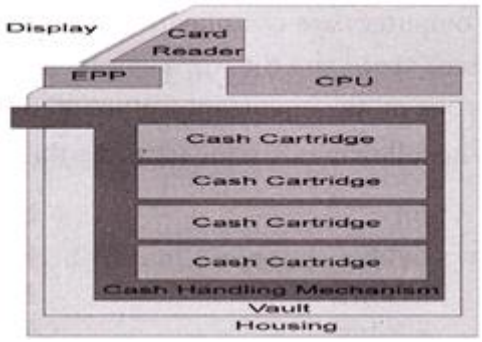
Minicomputers were introduced in early 1960s. They were faster than micro computers. Basically these computers were mainly multi-user systems, where many users work on the systems. Generally these types of computers had larger memories and greater storage capacity. They had large instruction set and address field. These kinds of computers have efficient storage for handling of text, in comparison to lower bit machines. Due to more efficient processor, speed and memory size, minicomputer was used in variety of applications and could support business applications along with the scientific applications. Minicomputer was a multi-user system which means more than one user could use this system simultaneously.

Comparison of Micro and Mini computers

Features	Microcomputer	Minicomputer
Primary memory	Shall memory	Larger memory
Word length	Small word length	Larger word length
Cost low	Low	High
Processor	Low	High

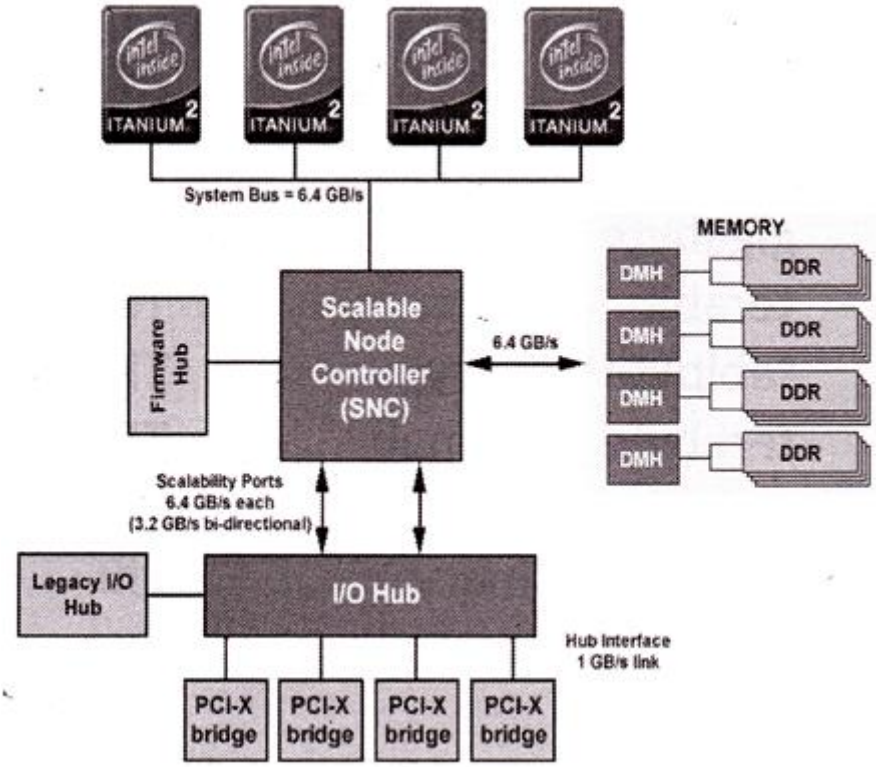
Mainframe Computers

Mainframe computers are large and expensive machines. The word length of mainframe computers may be 48, 60 or 64 bits, memory capacity being in some megabytes and storage capacity in some terabytes. Generally they handle huge volumes of information and data. In terms of speed, they are having significant processing capacity. They are used in research organizations, large industries, airlines reservation where a large database has to be maintained.



Super Computers

Super Computers are the fastest computer in current era. The processing capabilities of super computer lies in the range of GIPS2, word length 64-128 or may be in 256 or so. The memory capacity of super computer is in some gigabytes or in terabytes. The storage capacity of this type of computer is in exabytes.



The parallel processing of a super computer makes it very fast because it contains number of CPU that operates parallel. They are used at some research centers and government agencies involving sophisticated scientific and engineering tasks.

Super computers are used for the followings:

- ❖ Weapons research and development
- ❖ Nuclear and plasma physics
- ❖ Rocket research and development
- ❖ Atomic research
- ❖ Aerodynamics

Units For Measuring Word Length, Data, And Storage Capacity of a Computer

Computers are classified on the basis of their data processing speed better known as clock speed and the word length. The word length that is processed by a CUP at a time is one of the important feature of that CPU.

The followings are the units for the measurement of data volume:

bit	**bit**	**0 or 1**
Byte	**B**	**8 bite**
Kibibit	**Kibit**	**1024 bits**
kilobit	**Kbit**	**1000 bits**
kibibyte (binary)	**KiB**	**1024 bytes**
kilobyte (decimal)	**kB**	**1000 bytes**
megabit	**Mbit**	**1000 kilobits**
mebibyte (binary)	**MiB**	**1024 kibibytes**
megabyte (decimal)	**MB**	**1000 kilobytes**
gigabit	**Gbit**	**1000 megabits**
gibibyte (binary)	**Gibbs**	**1024 mebibytes**
gigabyte (decimal)	**GB**	**1000 megabytes**
terabit	**Tbit**	**1000 gigabits**
tebibyte (binary)	**TIB**	**1024 gibibytes**
terabyte (decimal)	**TB**	**1000 gigabyte**
Petabit	**Pbit**	**1000 terabyte**
pebibyte (binary)	**PiB**	**1024 tebibytes**
petabyte (decimal)	**PB**	**1000 terabytes**
exabit	**Ebit**	**1000 petabits**
exbibyte (binary)	**EiB**	**1024 pebibytes**
exabyte (decimal)	**EB**	**1000 petabytes**

Q3: What is the meaning of computer generation? How many Computer Generations are defined? What technologies were/are used?

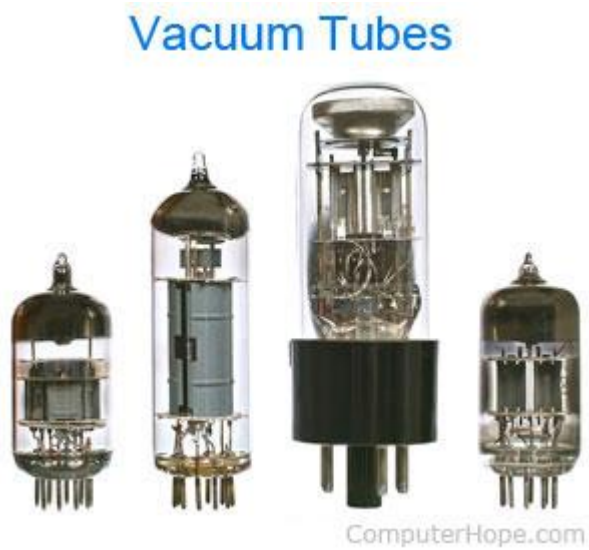
Ans. # How many generations of computers are there?

Computer generations are based on when major technological changes in computers occurred, like the use of vacuum tubes, transistors, and the microprocessor. As of 2020, there are five generations of the computer.

Review each of the generations below for more information and examples of

computers and technology that fall into each generation.

First generation (1940 - 1956)



The first generation of computers used vacuum tubes as a major piece of technology. Vacuum tubes were widely used in computers from 1940 through 1956. Vacuum tubes were larger components and resulted in first generation computers being quite large in size, taking up a lot of space in a room. Some of the first generation computers took up an entire room.

The ENIAC is a great example of a first generation computer. It consisted of nearly 20,000 vacuum tubes, 10,000 capacitors, and 70,000 resistors. It weighed over 30 tons and took up a lot of space, requiring a large room to house it. Other examples of first generation computers include the EDSAC, IBM 701, and Manchester Mark 1.

Second generation (1956 - 1963)

The second generation of computers saw the use of transistors instead of vacuum tubes. Transistors were widely used in computers from 1956 to 1963. Transistors were smaller than vacuum tubes and allowed computers to be smaller in size, faster in speed, and cheaper to build.

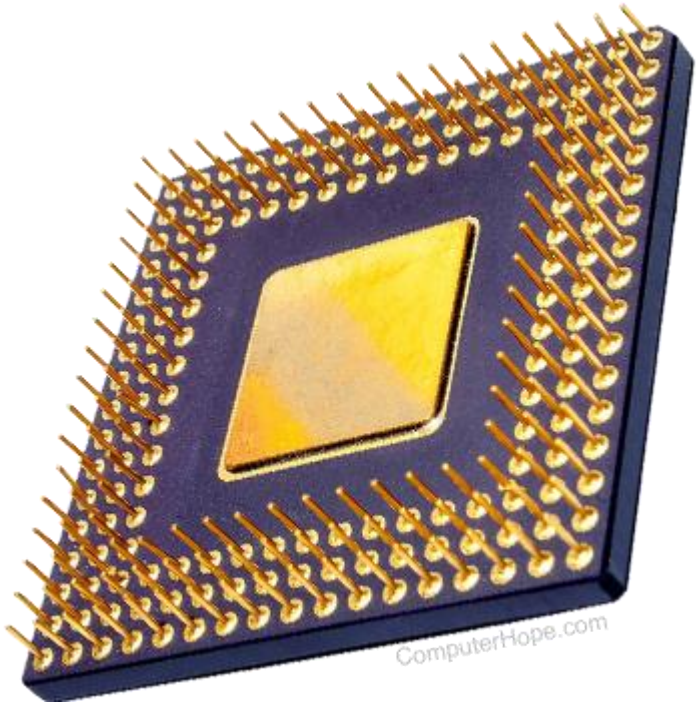
The first computer to use transistors was the TX-0 and was introduced in 1956. Other computers that used transistors include the IBM 7070, Philco Transac S-1000, and RCA 501.

Third generation (1964 - 1971)

The third generation of computers introduced the use of IC (integrated circuits) in computers. Using IC's in computers helped reduce the size of computers even more compared to second-generation computers, and make them faster.

Nearly all computers since the mid to late 1960s have utilized IC's. While the third generation is considered by many people to have spanned from 1964 to 1971, IC's are still used in computers today. Over 45 years later, today's computers have deep roots going back to the third generation.

Fourth generation (1972 - 2010)



The fourth generation of computers took advantage of the invention of the microprocessor, more commonly known as a CPU. Microprocessors, with integrated circuits, helped make it possible for computers to fit easily on a desk and for the introduction of the laptop.

Some of the earliest computers to use a microprocessor include the Altair 8800, IBM 5100, and Micral. Today's computers still use a microprocessor, despite the fourth generation being considered to have ended in 2010.

Fifth generation (2010 to present)

The fifth generation of computers is beginning to use AI (artificial intelligence), an exciting technology with many potential applications around the world. Leaps have been made in AI technology and computers, but there is still room for much improvement.

One of the more well-known examples of AI in computers is IBM's Watson, which was featured on the TV show Jeopardy as a contestant. Other better-known examples include Apple's Siri on the iPhone and Microsoft's Cortana on Windows 8 and Windows 10 computers. The Google search engine also utilizes AI to process user searches.

Q4: Differentiate between Volatile & Non- Volatile memories.

Ans. Difference between Volatile Memory and Non-Volatile Memory

- Difficulty Level : Easy
- Last Updated : 28 Jun, 2020

Volatile Memory:
It is the memory hardware that fetches/stores data at a high-speed. It is also referred as temporary memory. The data within the volatile memory is stored till the system is capable of, but once the system is turned off the data within the volatile memory is deleted automatically. RAM (Random Access Memory) and Cache Memory are some common examples of volatile memory. Here, data fetch/store is fast and economical.

Non-Volatile Memory:
It is the type of memory in which data or information is not lost within the memory even power is shut-down. ROM (Read Only Memory) is the most common example of non-volatile memory. It's not economical and slow in fetch/store as compared to volatile memory however stores higher volume of data. All such information that needs to be stored for an extended amount of time is stored in non-volatile memory. Non-volatile memory has a huge impact on a system's storage capacity.
Below are the differences between volatile and non-volatile memory:

S.NO	Volatile Memory	Non-Volatile Memory
1.	Volatile memory is the type of memory in which data is lost as it is powered-off.	Non-volatile memory is the type of memory in which data remains stored even if it is powered-off.
2.	Contents of Volatile memory is stored temporarily.	Contents of Non-volatile memory is stored permanently.
3.	It is faster than non-volatile memory.	It is slower than volatile memory.
4.	**RAM(Random Access Memory)** is an example of volatile memory.	**ROM(Read Only Memory)** is an example of non-volatile memory.

S.NO	Volatile Memory	Non-Volatile Memory
5.	In volatile memory, data can be easily transferred in comparison to non-volatile memory.	In non-volatile memory, data can not be easily transferred in comparison to volatile memory.
6.	In Volatile memory, process can read and write.	In Non-volatile memory, process can only read.
7.	Volatile memory generally has less storage capacity.	Non-volatile memory generally has more storage capacity than volatile memory.
8.	In volatile memory, the program's data are stored which are currently in process by the CPU.	In non-volatile memory, any kind of data which has to be saved permanently are stored.
9.	Volatile memory is more costly per unit size.	Non-volatile memory is less costly per unit size.
10.	Volatile memory has a huge impact on the system's performance.	Non-volatile memory has a huge impact on a system's storage capacity.
11.	In volatile memory, processor has direct access to data.	In non-volatile memory, processor has no direct access to data.
12.	Volatile memory chips are generally kept on the memory slot.	Non-volatile memory chips are embedded on the motherboard.

Q5: Distinguish among system software, application software and open source software on the basis of their features.

Ans. System Software:
System Software is the type of software which is the interface between application software and system. Low level languages are used to write the system software. System Software maintain the system resources and give the path for application software to run. An important thing is that without system software, system can not run. It is a general purpose software.

Application Software:
Application Software is he type of software which runs as per user request. It runs on the platform which is provide by system software. High level languages are used to write the application software. Its a specific purpose software.
The main difference between System Software and Application Software is that without system software, system can not run on the other hand without application software, system always runs.

open source software

Open source software is software with source code that anyone can inspect, modify, and enhance.

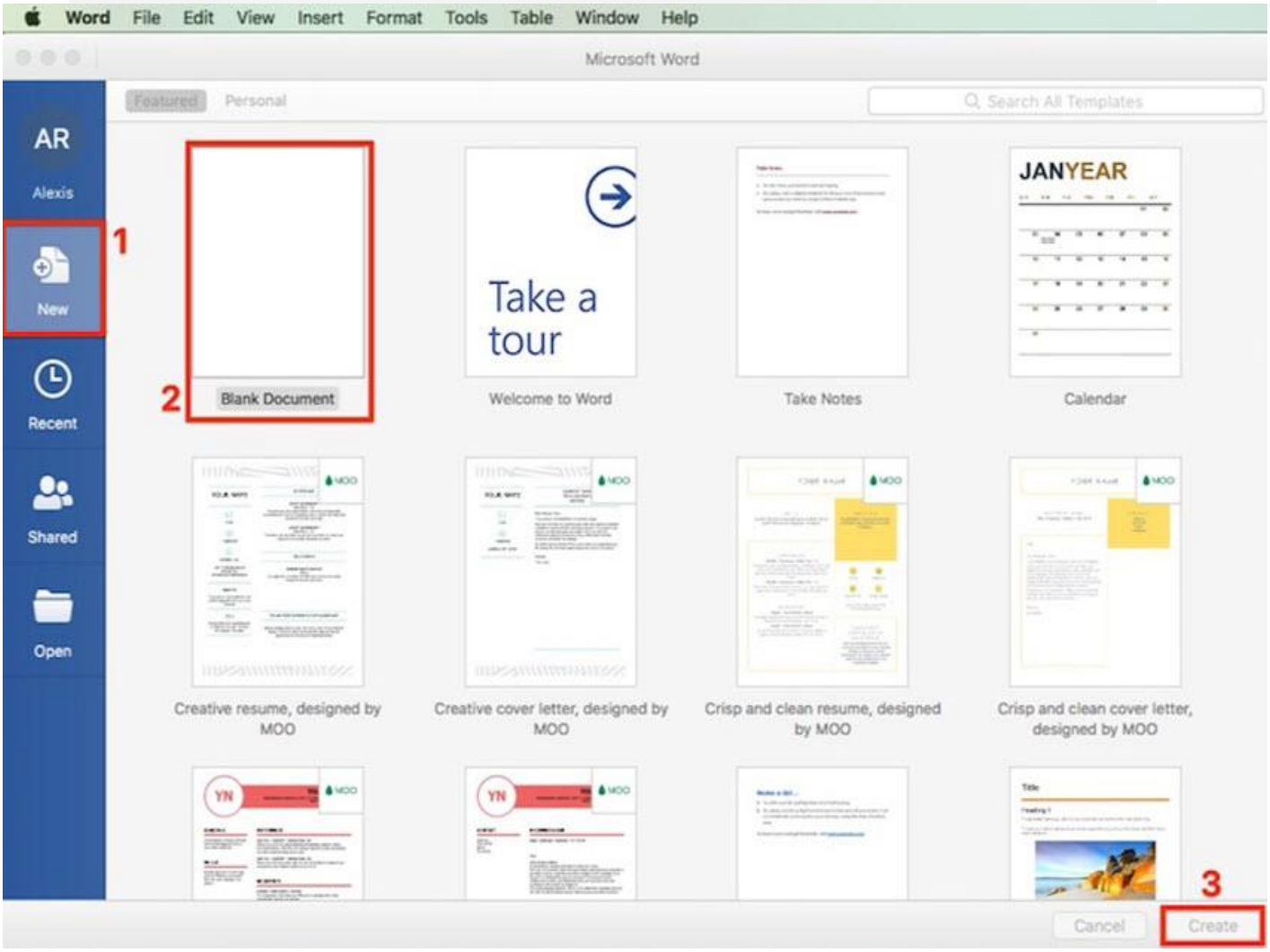
"Source code" is the part of software that most computer users don't ever see; it's the code computer programmers can manipulate to change how a piece of software—a "program" or "application"—works. Programmers who have access to a computer program's source code can improve that program by adding features to it or fixing parts that don't always work correctly. Some software has source code that only the person, team, or organization who created it—and maintains exclusive control over it—can modify. People call this kind of software "proprietary" or "closed source" software.

Only the original authors of proprietary software can legally copy, inspect, and alter that software. And in order to use proprietary software, computer users must agree (usually by signing a license displayed the first time they run this software) that they will not do anything with the software that the software's authors have not expressly permitted. Microsoft Office and Adobe Photoshop are examples of proprietary software.

Q6. a) Create a file in MS-word to insert a paragraph about yourself and save it with file name “yourself”. Describe all steps involved in it.

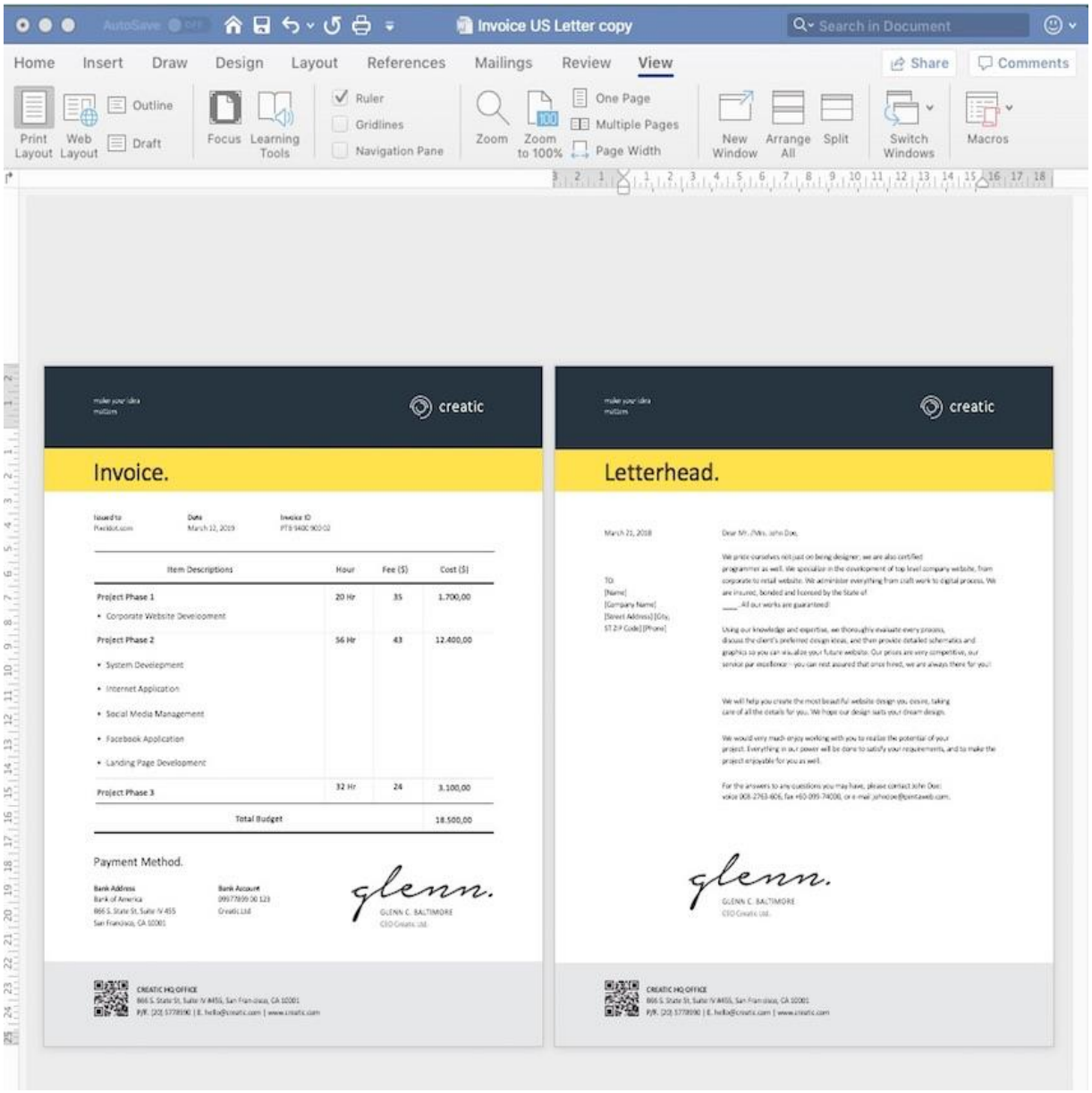
Ans. When you launch Microsoft Word for the first time, it automatically opens a new blank Word document. From here, you can proceed to make your business letter.

Otherwise, when prompted, select **New** > **Blank Document** > **Create**.



Open the Template in Word

Launch Microsoft Word, then select **Open**. Follow the rest of the prompts to open the duplicate template file you created earlier.



Work in a copy of the Word template you downloaded to preserve the original template.

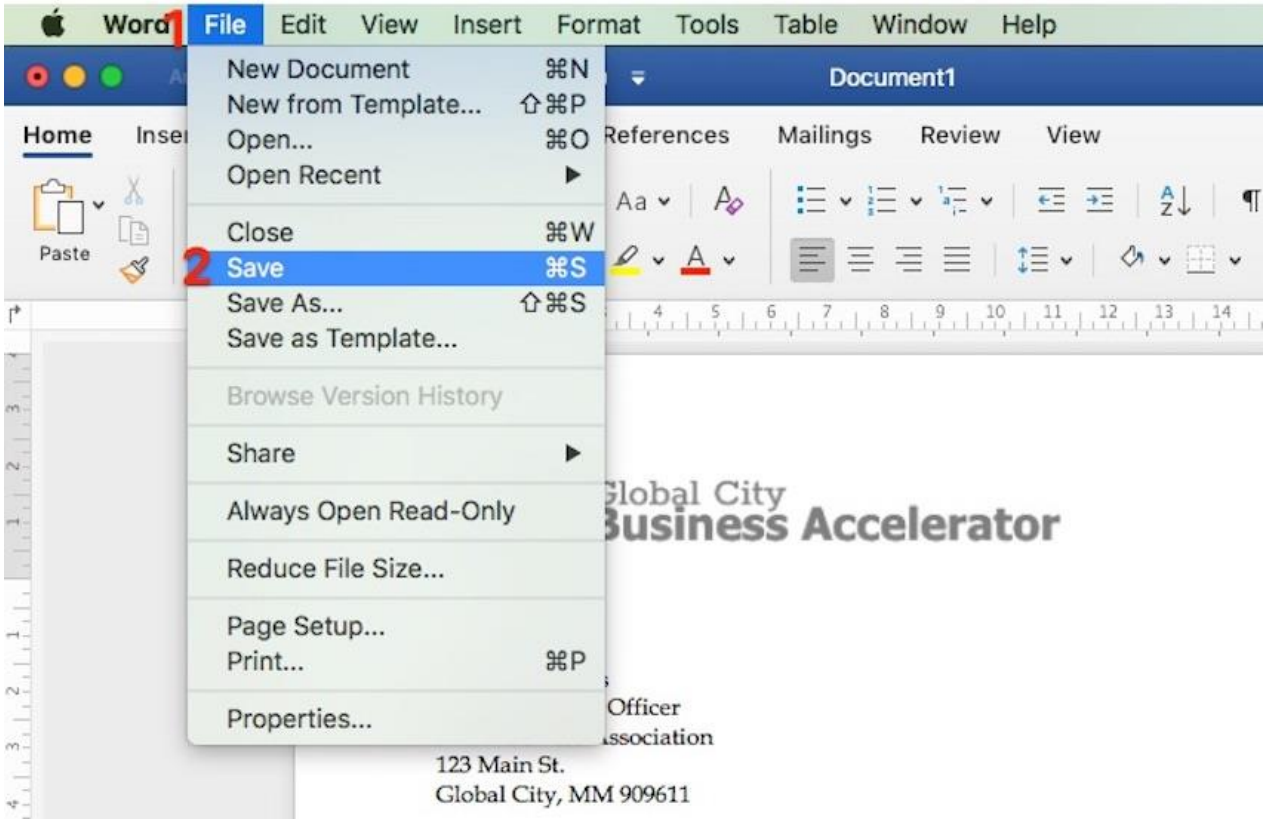
Save a File in Microsoft Word

Always save your work as you go! Otherwise, you run the risk of losing your work, should your computer shut off or crash unexpectedly. This section is for you if you're asking: *"how do you save a file on Microsoft Word?"*

The quickest way is to click the **Save** button on the top of Microsoft Word.

Here's how to save a Microsoft Word file. Start by clicking the **Save** icon.

Or, go to **File** > **Save**.

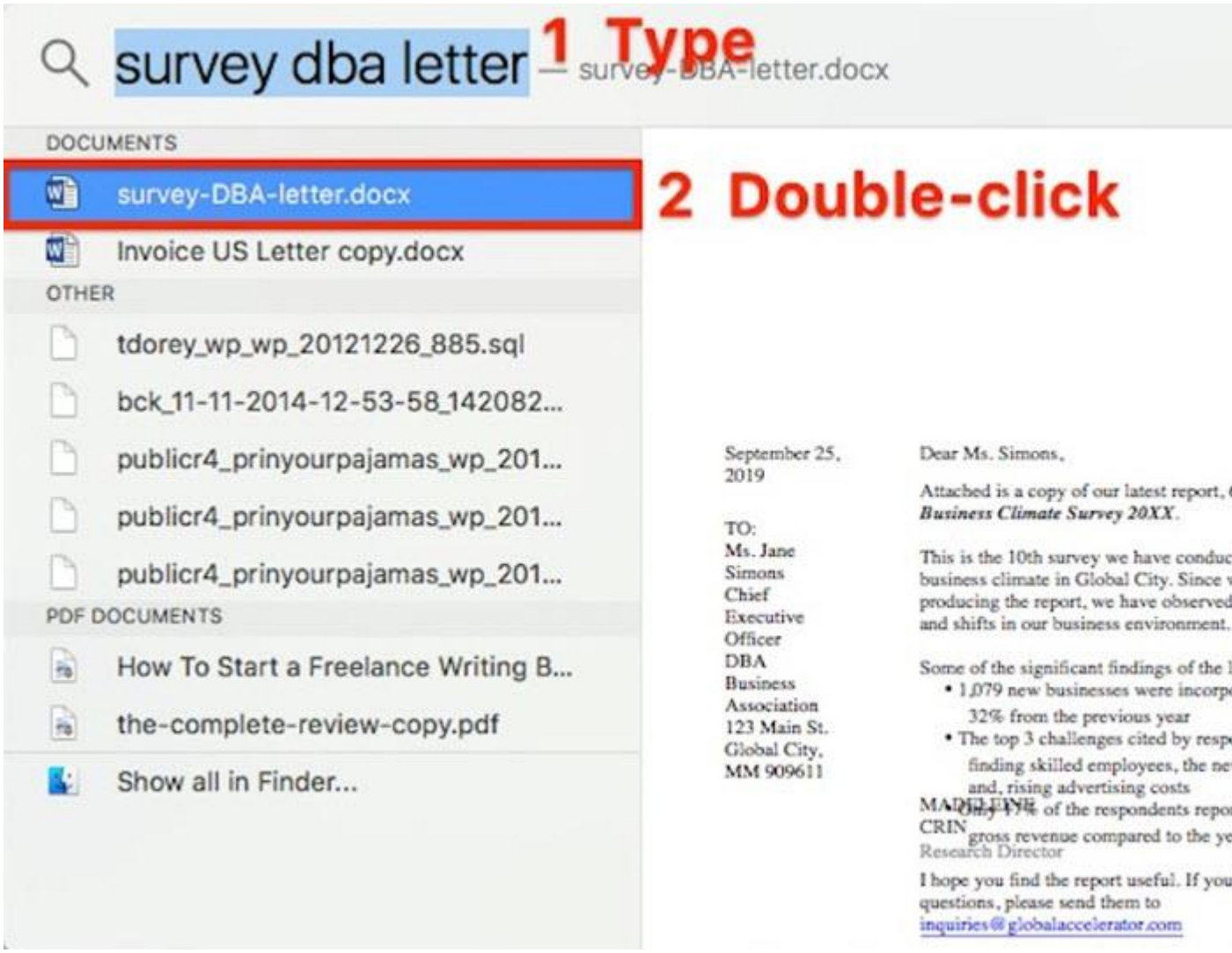


How to Open a File in Word

You can open a saved MS Word file on a Mac in one of three ways:

Option 1. Use Spotlight

If you remember the file name, you can use **Spotlight** to find and open the file. Click on the **Spotlight** button in the upper-right hand corner of your screen. Type the file name in the **Spotlight** search box.

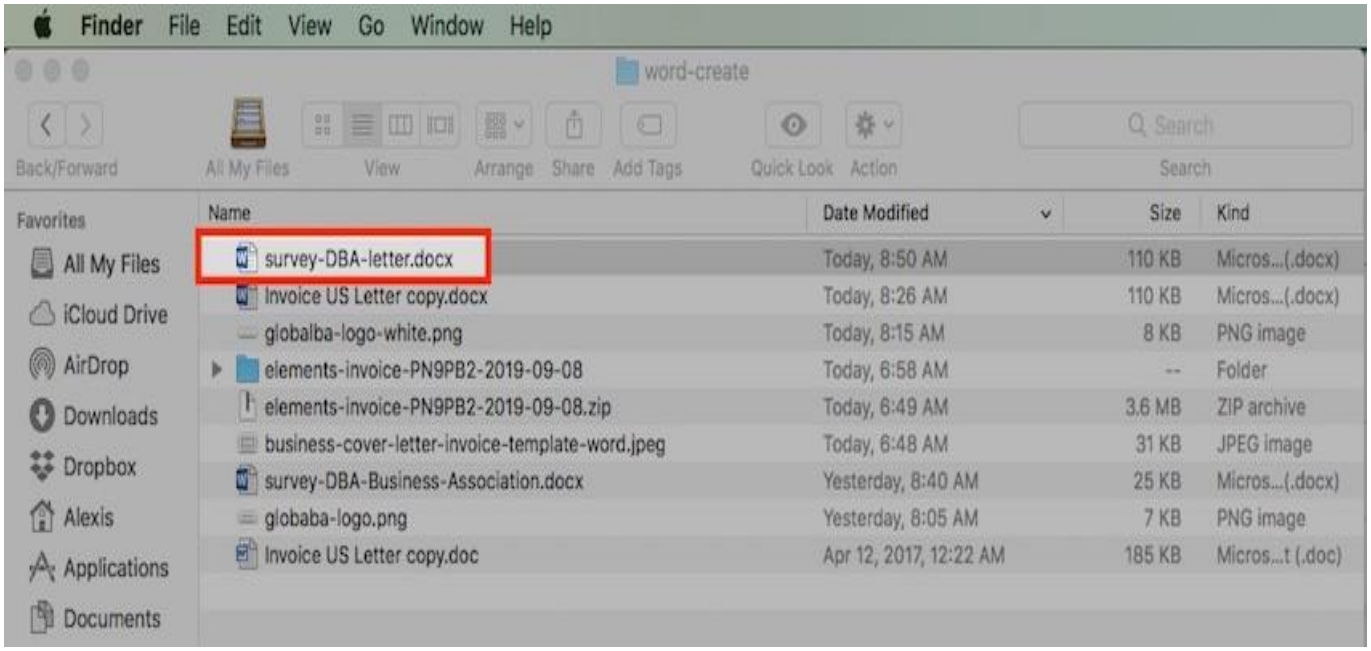


If you're wondering how to open a new file in MS Word, **Spotlight** can help.

When the file appears in **Spotlight**, double-click on the file name. The file opens in MS Word.

Option 2. Use Finder

Launch Finder. Either use the **Search** bar to find the file or navigate to the file by going to its specific location.



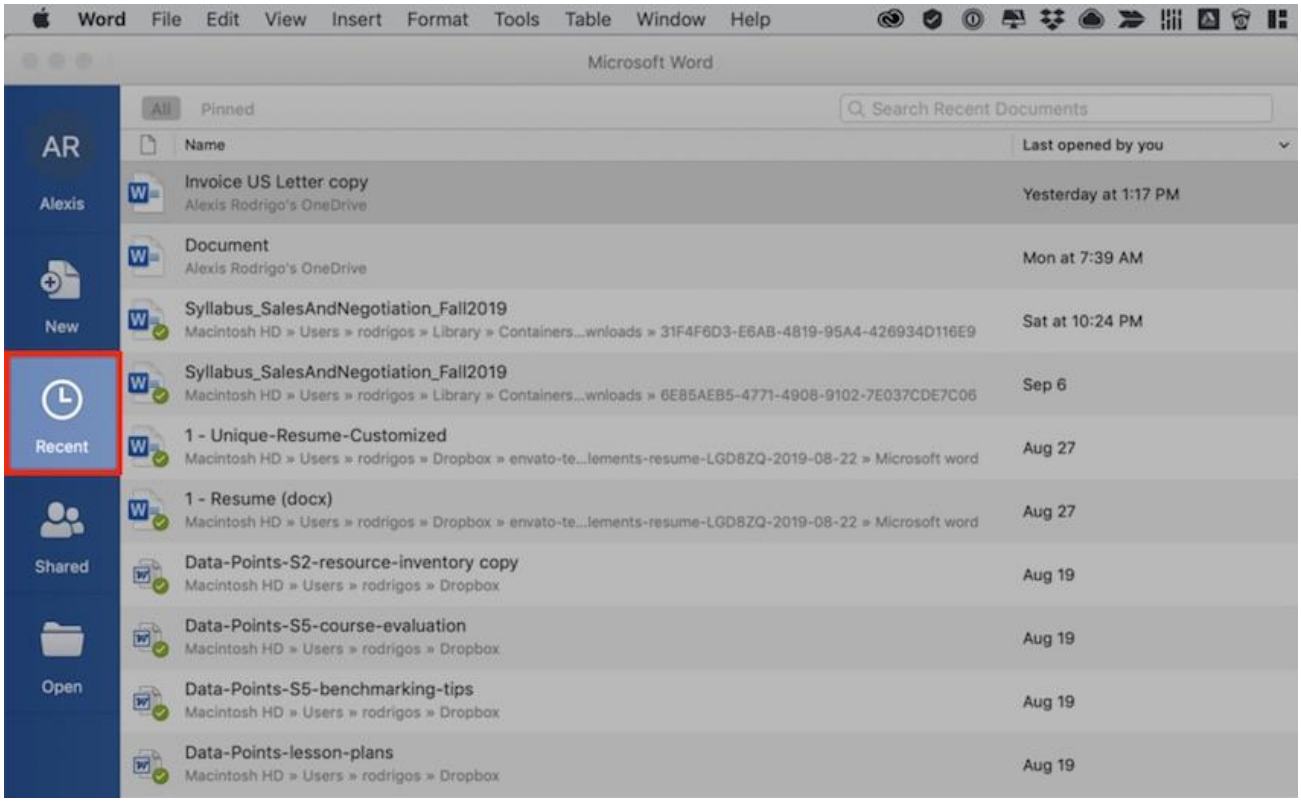
Another way to open a file is through **Finder.**

Double-click on the file name to open the file.

Option 3. Use Microsoft Word

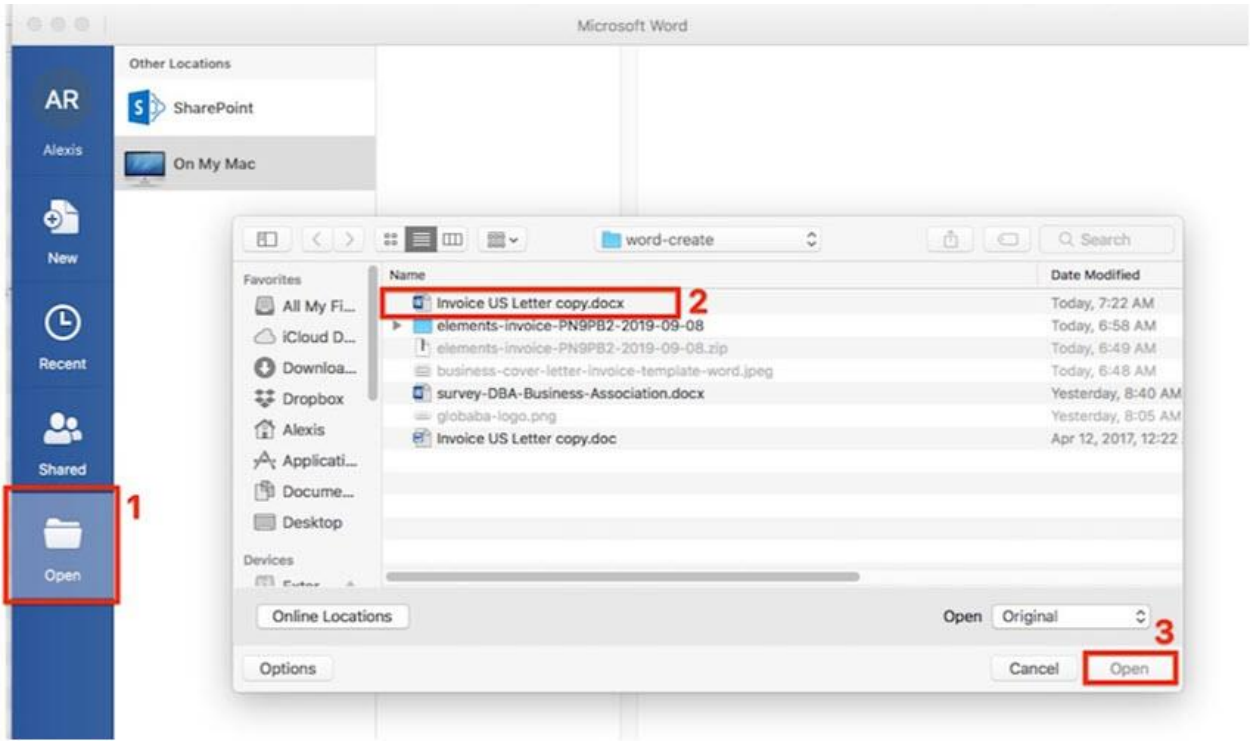
Here's how to open a saved document in MS Word.

Launch Microsoft Word, then click on **Recent** to see a list of files you've worked on recently. Double-click on the file you wish to open.



Click **Recent** to see files you've recently created.

Or, click on **Open**. Locate the file you want to open in your computer or cloud storage and select it. Click **Open** at the bottom of the dialog box.



Q6 b) Write steps regarding followings

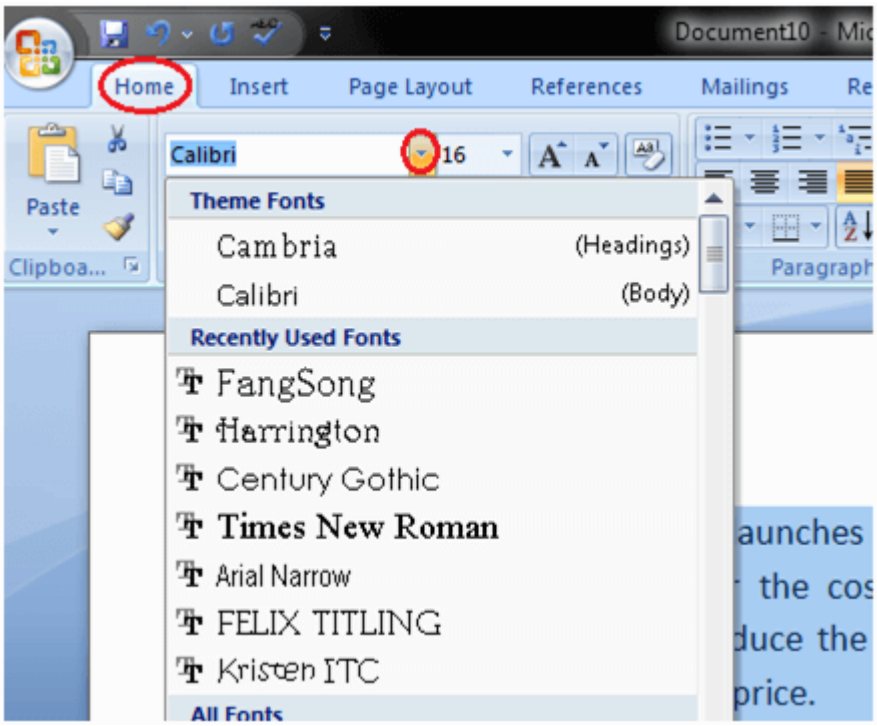
□ To change the font style

How to Change Font Style in MS Word

The basic steps to change the font of a text in a document are given below;

- Select the text you want to modify
- Select the Home tab and locate the Font group
- Click the drop-down arrow next to font style box
- Font style menu appears
- With a left click select the desired font style
- If you want to change the font to bold or italic, click the 'B' or 'I' icons on the format bar.

See the image:

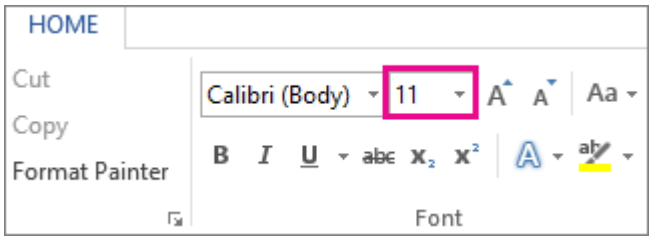


To change the font size

Change the size of selected text

To change the font size of selected text in desktop Excel, PowerPoint, or Word:

1. Select the text or cells with text you want to change. To select all text in a Word document, press Ctrl + A.
2. On the **Home** tab, click the font size in the **Font Size** box.



Change the font color

You can change the color of text in your Word document.

1. Select the text that you want to change.
2. On the **Home** tab, in the **Font** group, choose the arrow next to **Font Color**, and then select a color.

You can also use the formatting options on the Mini toolbar to quickly format text. The Mini toolbar appears automatically when you select text.

Q7. Create a file in MS-Word for the following document and save it with file name ‘ms_word’. Describe all steps involved in it.

Ans. **MS WORD**

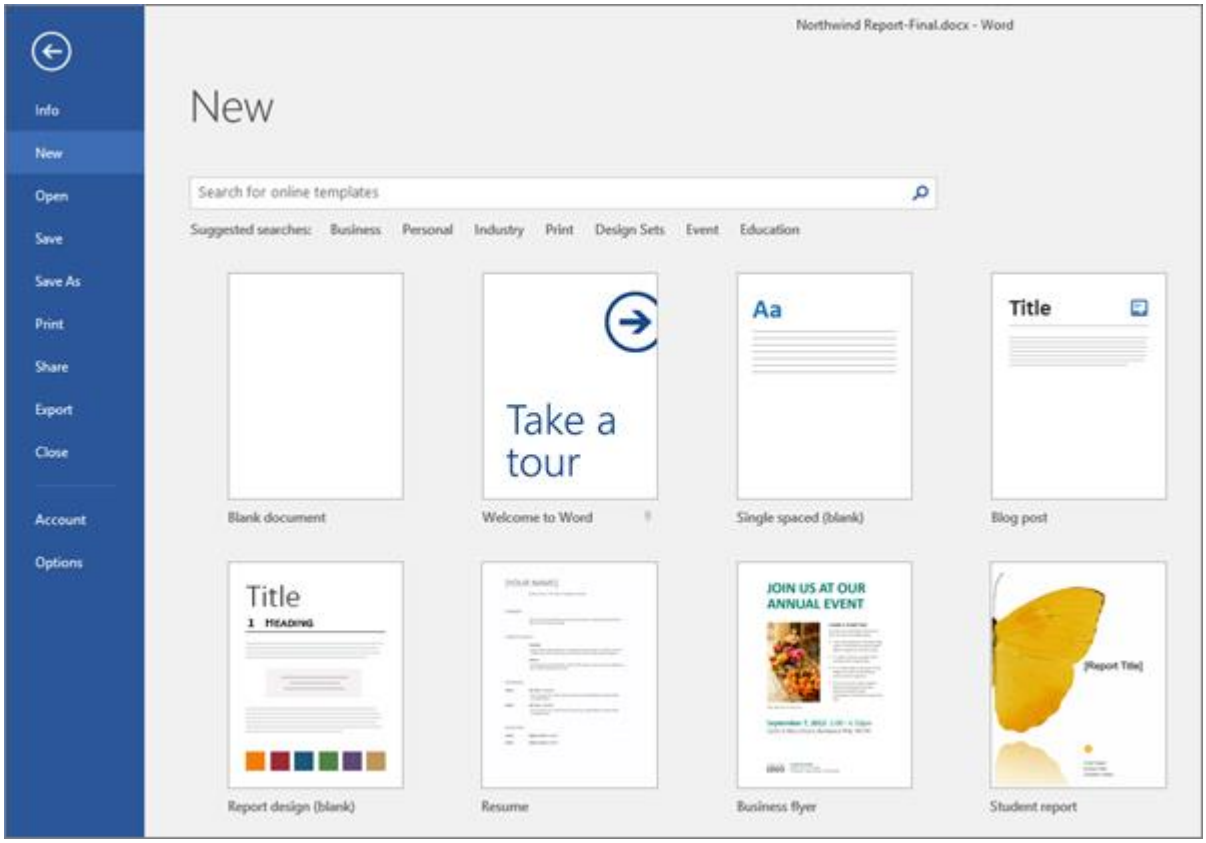
Create a document

Create a blank document

1. Open Word. Or, if Word is already open, select **File** > **New**.
2. Select **Blank document**.

Create a document using a template

1. Open Word. Or, if Word is already open, select **File** > **New**.



2. Double-click a template to open it.

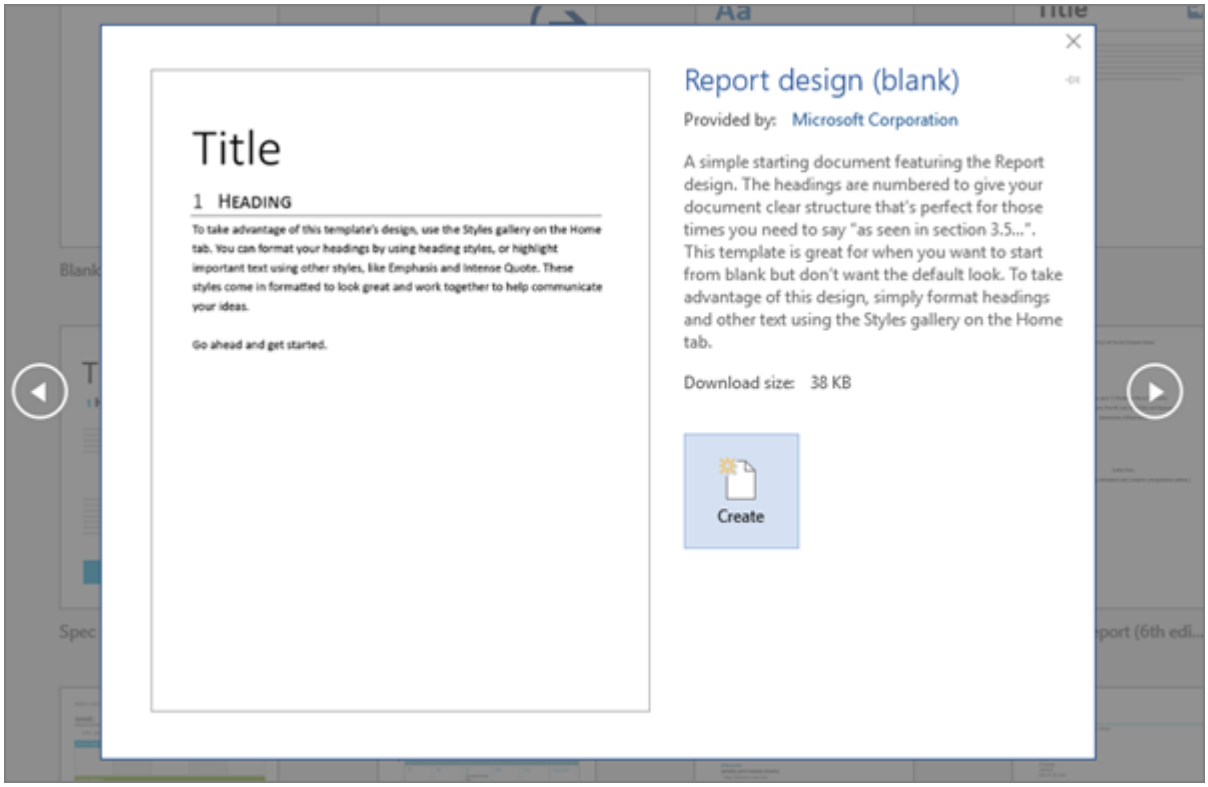
Tip: Pin templates you like, so you always see them when you start Word. Select the template and then select the pin icon that appears next to the name of the template.

Search for a template

1. Open Word. Or, if Word is already open, select **File** > **New**.
2. In the **Search for online templates** box, enter a search word like **letter**, **resume**, or **invoice**.

Or, select a category under the search box like **Business**, **Personal**, or **Education**.

3. Click a template to see a preview. Click the arrows on the side of the preview to see more templates.



4. Select **Create**.

Edit a Microsoft Word document

1. Open the file that you want to edit.
2. Choose from the following tasks:

Task	Steps
Edit text	**a.** Click the **Edit** tab.

Task	Steps
	b. Select the text that you want to edit. c. Using the tools in the edit toolbar, change the required formatting including font style, paragraph alignment, list formatting, and indentation options.
Insert images	**d.** Click the **Insert** tab. e. Place your cursor where you want to add an image. **f.** To add an image from your computer, click **Image** . g. Choose the image to add.

Task	Steps
Mark up the document	If you are viewing a .docx file, you can use the following review features: **h.** Click the **Review** tab. **i.** Click **Author** to enter the name that will be associated with the changes that y m ake in the document. **j.** Turn on **Track Changes** if you want to keep track of the changes that you make to the document. **k.** Turn on **Show Changes** to see all the changes that have been made to the document. **l.** Click **Accept** to convert the currently selected tracked change to final text. **m.** Click **Reject**

Task	Steps
	to revert the currently selected tracked change to the previous text. **n.** Click **Next** to go to the next tracked change in the document.

Steps to save Documents in Word Format

Documents saved in the proprietary formats of Pages, OpenOffice, or WordPerfect **cannot be opened in Microsoft Word.** Therefore, you must change the file type when you save the document. Follow the steps below to do so.

Steps to Save OpenOffice Documents as Word Documents

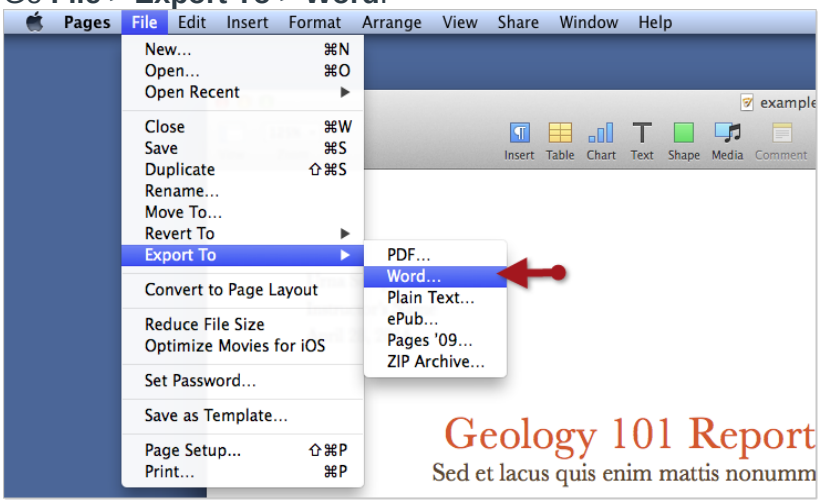
1. From the **File** menu, select **Save As**…
2. The Save As dialog box will display.

3. Choose a location on your computer to save your file. You may want to create a folder to store all your class assignments.
4. Next to **File Type** is a drop down menu; select **Rich Text Format (.rtf)** or **Microsoft Word (*.doc).**
5. Click **Save**. A copy of your document has been saved as Rich Text Format or Microsoft Word format.

Steps to Save Apple Pages Documents as Word Documents

Note: For Apple's Pages you must export the document to the Word format.

1. Go **File > Export To > Word**.



2. The Export dialogue box will open.
3. The first screen will ask if you want to password protect the document; do not select this. Click **Next...**
4. Choose a location on your computer to save your file. You may want to create a folder to store all your class assignments.
5. Click **Export**. A copy of your document has been saved as Rich Text Format or Microsoft Word format.

Printing any type of document

Steps

1

Open or create a Microsoft Word document. To do so, click on the blue app with a white document icon and bold "**W**," then click on **File** in the menu bar at the upper-left of the screen. Click on **Open...** to open an existing document or **New...** to create a new one.

- When you are ready to print, open the Print dialog box.

2

Click on File. It's in the menu bar at the upper-left of the screen or a tab at the upper-left of the window.

3

Click on Print.... The Print dialog box will open.

4

Select your printing options. Use the selections in the dialog box to select:

- Your default printer is displayed. Click on its name to select another printer from the drop-down menu.
- The number of copies to print. The default is 1; increase the quantity to print more copies.
- Which pages to print. The default is to print all the pages in the document, but you can choose to print the currently-displayed page, a highlighted selection, specific pages in the document, odd-numbered pages only, or even-numbered pages only.
- The size of paper to print on.
- The number of pages to print per sheet.
- Orientation of the paper. Select either Portrait (paper length vertical, width horizontal) or Landscape (paper width vertical, length horizontal).
- Margins. You can adjust the top, bottom, left, and right margins with the labeled up and down arrows or by typing numbers in the boxes.

Click on Print or OK. The button label will vary based on the version of Word you're using. Your document will print to the printer you selected.

Q8. Create a file in MS-word for the following document and save it with file name ‘equations’. Describe all steps involved in it.

Equation

$X_2+Y_5=30$

$Z^3+Q^4=50$

$A^2+B^8=X_2+Y^8$

Ans.

Q9. Create a file in MS-word that convert existing highlight text to table as shown below and save it as file name ‘text_to_table’. Describe all steps involved in it.

Ans.

Q10. Create a file in MS-Word to insert a table in the document. Describe all steps involved in it.

Ans.

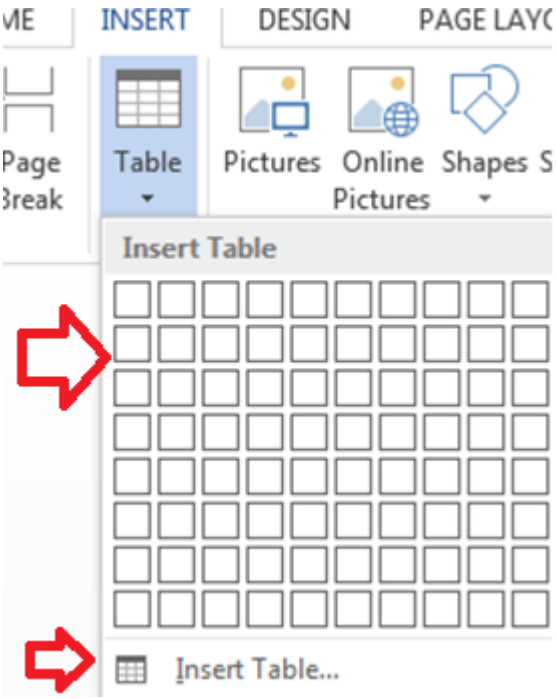
The basic steps for creating a standard table in Microsoft Word (2013) are:

1. Open a blank Word document

2. In the top ribbon, press *Insert*

3. Click on the *Table* button

4. Either use the diagram to select the number of columns and rows you need, or click *Insert Table* and a dialog box will appear where you can specify the number of columns and rows.



5. The blank table will now appear on the page. Alter it as necessary. Standard features like **bold**, *italics*, and underline are still available! These items may be helpful for creating headings or calling out certain items in the table.

6. Follow these instructions for ensuring your table meets APA formatting guidelines.

Need additional help? The tutoring service has self-paced table and chart lessons/tutorials within SkillSurfer. Follow these steps to access:

1. Log into the **tutoring service** (click on the blue hyperlink to the left to login!)

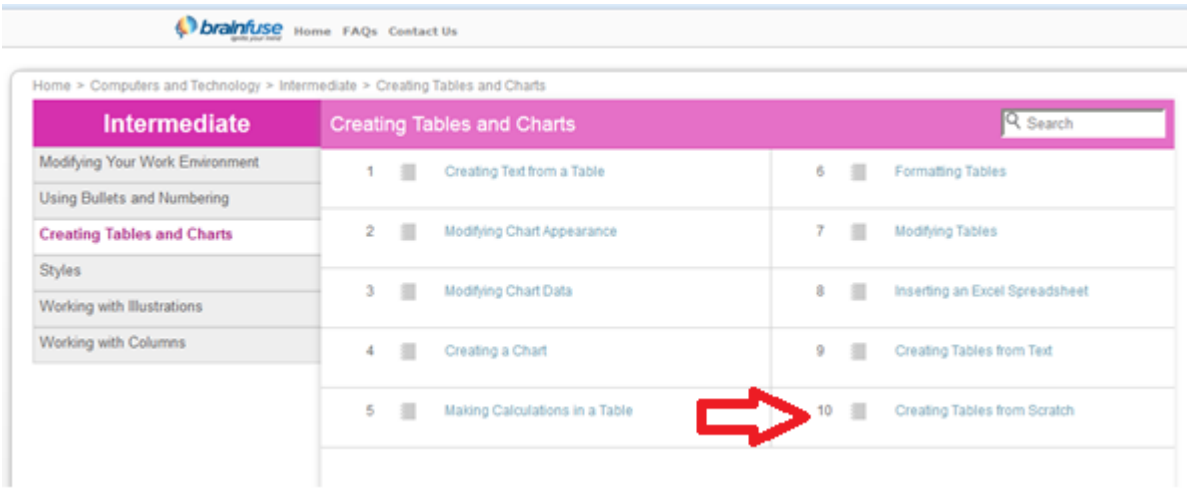
2. Click on *SkillSurfer*

3. Click on *Computers and Technology*

4. Click on *Intermediate* underneath *Microsoft Word*

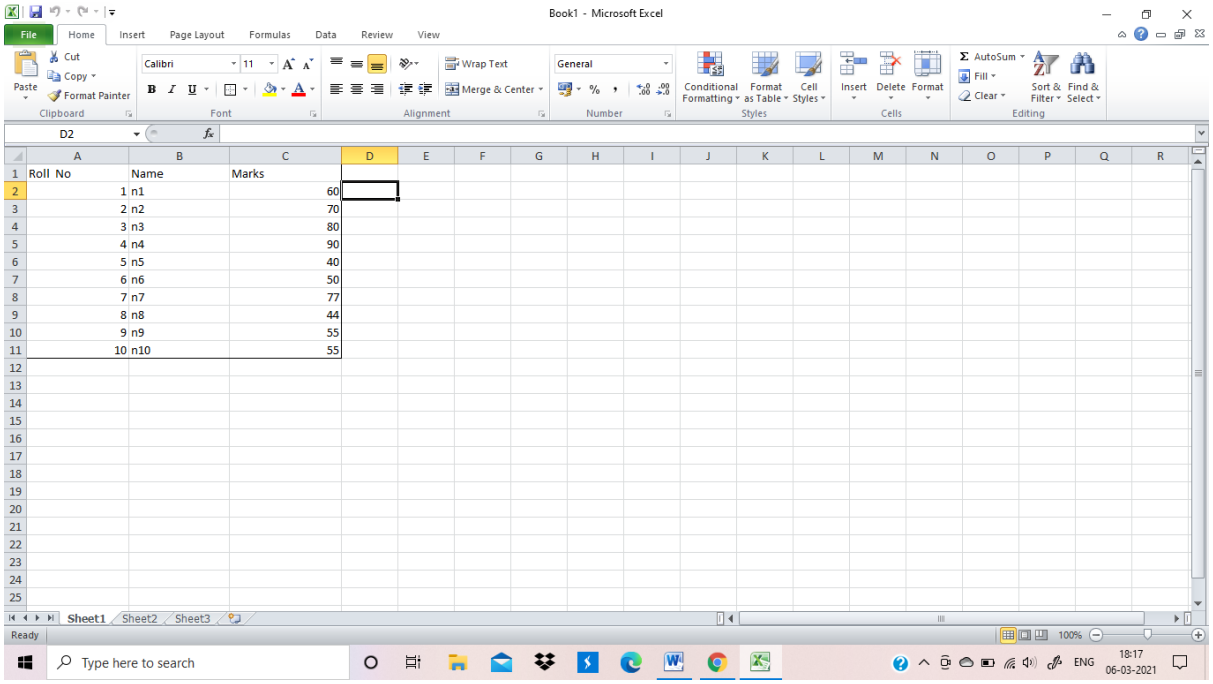
5. Select *Creating Tables and Charts*

6. Choose the exact item(s) you wish to learn about (likely *Creating Tables from Scratch*).



Q11. Create a following worksheet in MS-excel and save it with name ‘book1’.

Ans.



Q12 Calculate the following things of a range (C2:C11) of data in the worksheet created in question no 10.

1.the sum of the marks using AutoSum in a range of cells (C2:C11)

Ans. =654

2 average of the marks in a range of cells (C2:C11)

Ans. = 65.4

3.highest marks in a range of cells (C2:C11)

Ans. 90

4.minimum marks in a range of cells (C2:C11)

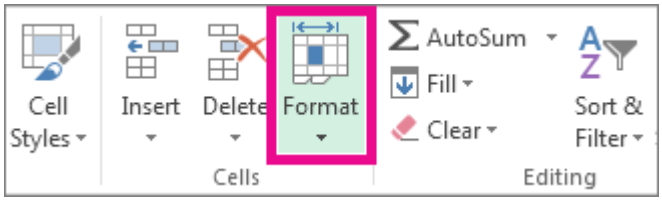
Ans.40

Q13 a) Describe various steps involved in the following

- **To modify column width of a worksheet**

Ans. Set a column to a specific width

1. Select the column or columns that you want to change.
2. On the **Home** tab, in the **Cells** group, click **Format**.



3. Under **Cell Size**, click **Column Width**.
4. In the **Column width** box, type the value that you want.
5. Click **OK**.

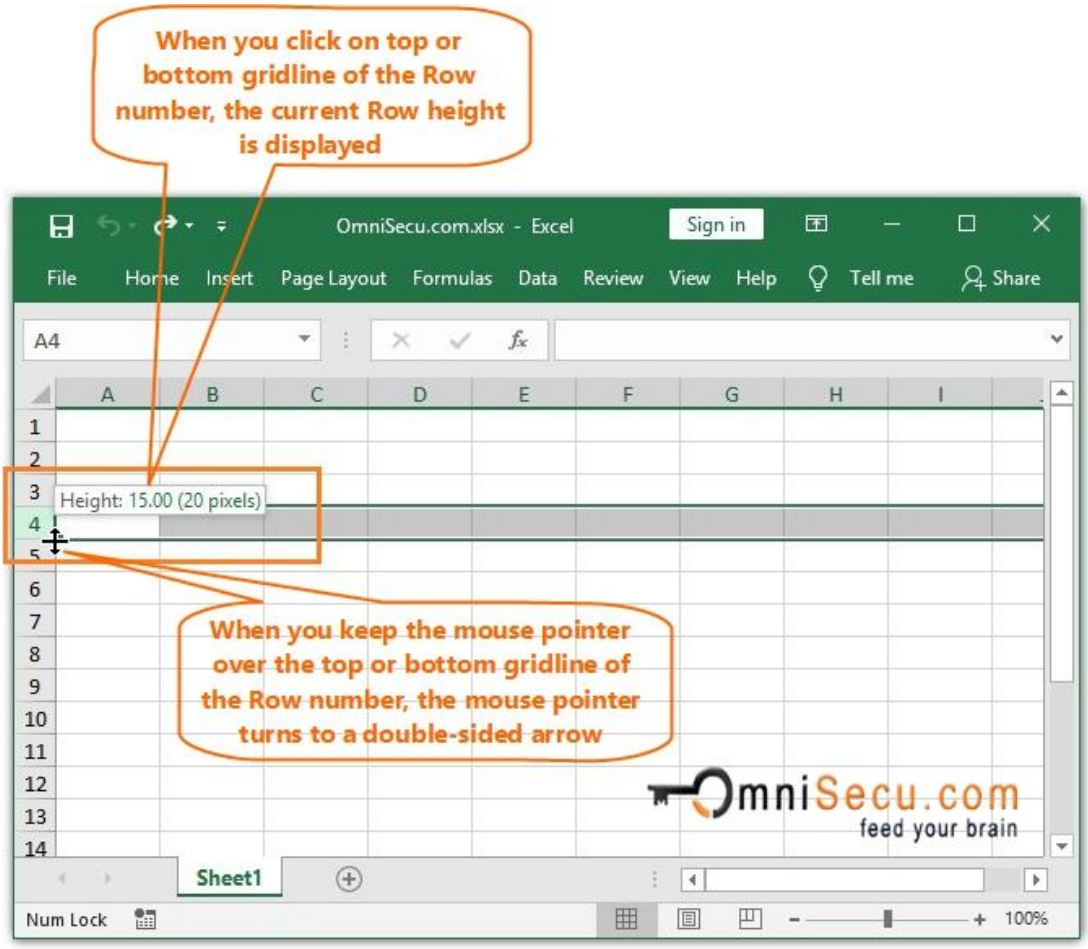
- **To modify the row height of a worksheet**

How to change Row height by clicking and dragging on boundary gridline

To change the Row height of a single Row by clicking and dragging on Row boundary gridline, follow these steps.

Step 1 - Select the Row you want to change its height by clicking on Row number. Place the mouse pointer on top or bottom gridline of the Row number until the mouse pointer turns to a double-sided arrow. You need to place the mouse pointer on top or bottom gridline depending on to top or bottom direction you want to change the Row height. In this example, Row number 4 and bottom gridline are selected.

Now click on the bottom gridline of Row number, as shown below.



To delete rows and columns of a worksheet

Delete a Column in Excel

If we want to delete a column in Excel we have to select the column by clicking on the column header and to do the right mouse click and choose the Delete option in the drop-down list.

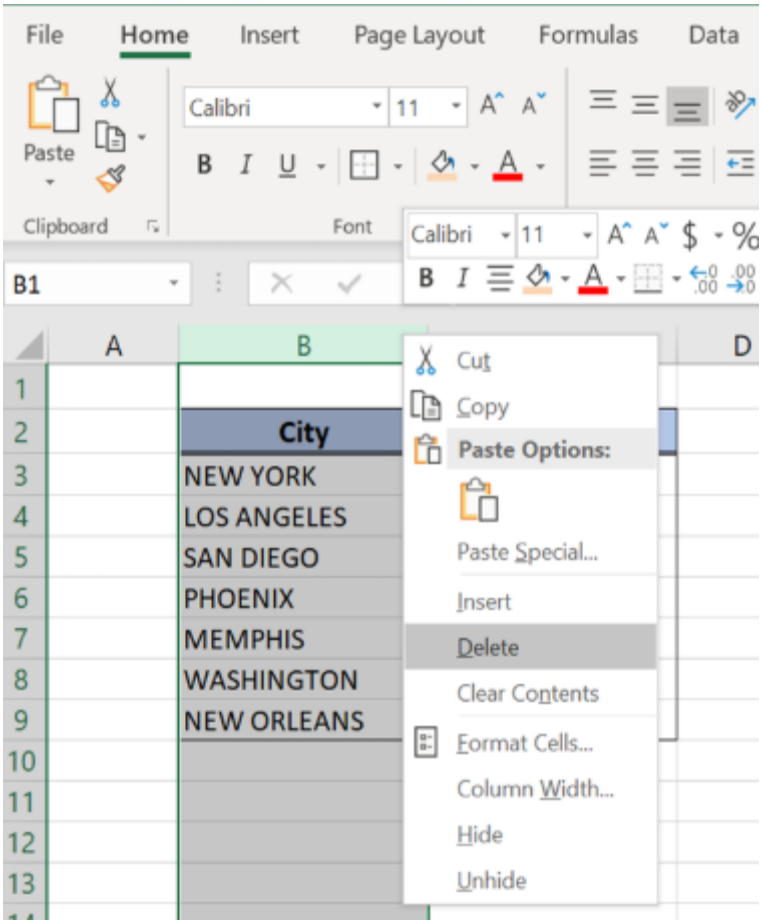


Figure 1. Delete a column in Excel

Delete a Row in Excel

To delete a row in Excel we can use Delete tab under Home-Cells in Excel. First, we have to select the cell in the row to be deleted and to click on the Delete tab under the section Home-Cells.

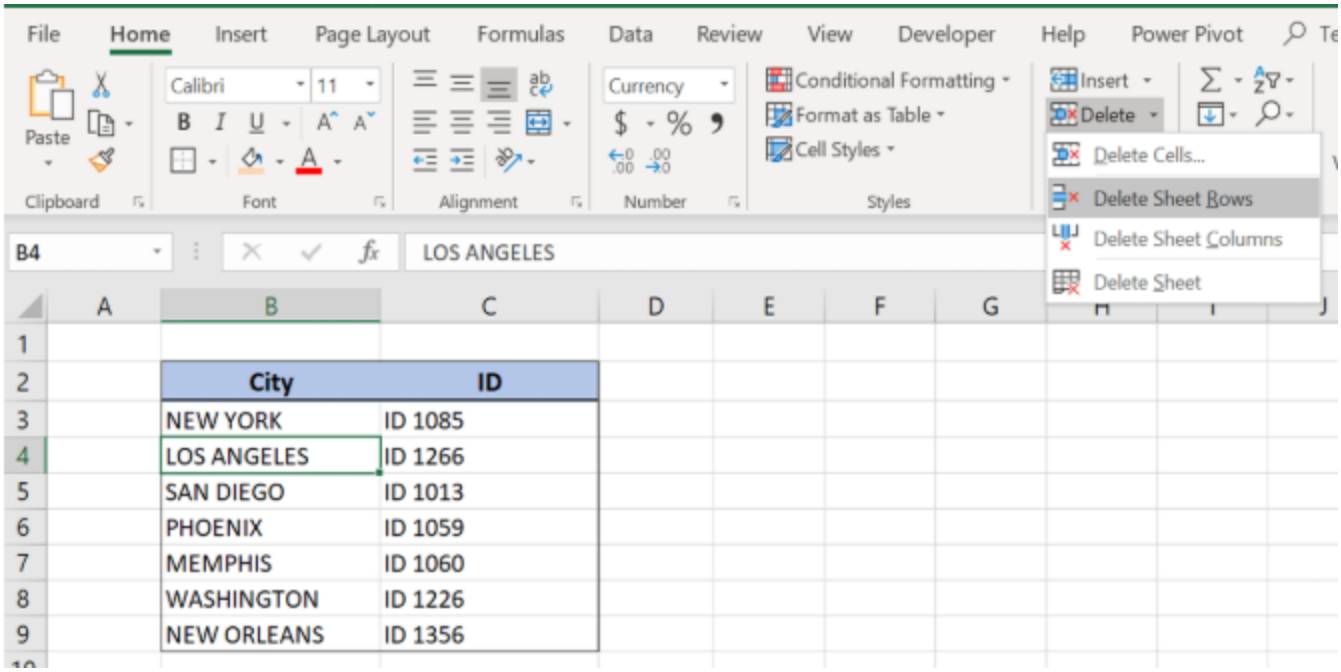


Figure 3. Delete a row in Excel using Delete tab

Choose Delete Sheets Rows and row 4 will be deleted:

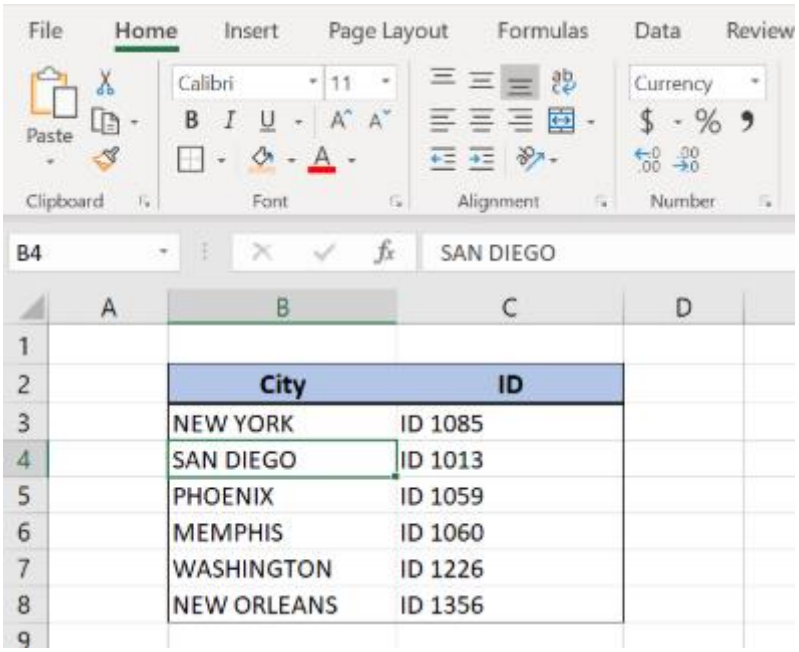


Figure 4. The Result after deleting

Q13 b) Describe following terms in the worksheet

- **Absolute reference and relative reference in formula**

Relative references

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

To create and copy a formula using relative references:

In the following example, we want to create a formula that will multiply each item's **price** by the **quantity**. Rather than create a new formula for each row, we can create a single formula in cell D2 and then copy it to the other rows. We'll use relative references so the formula correctly calculates the total for each item.

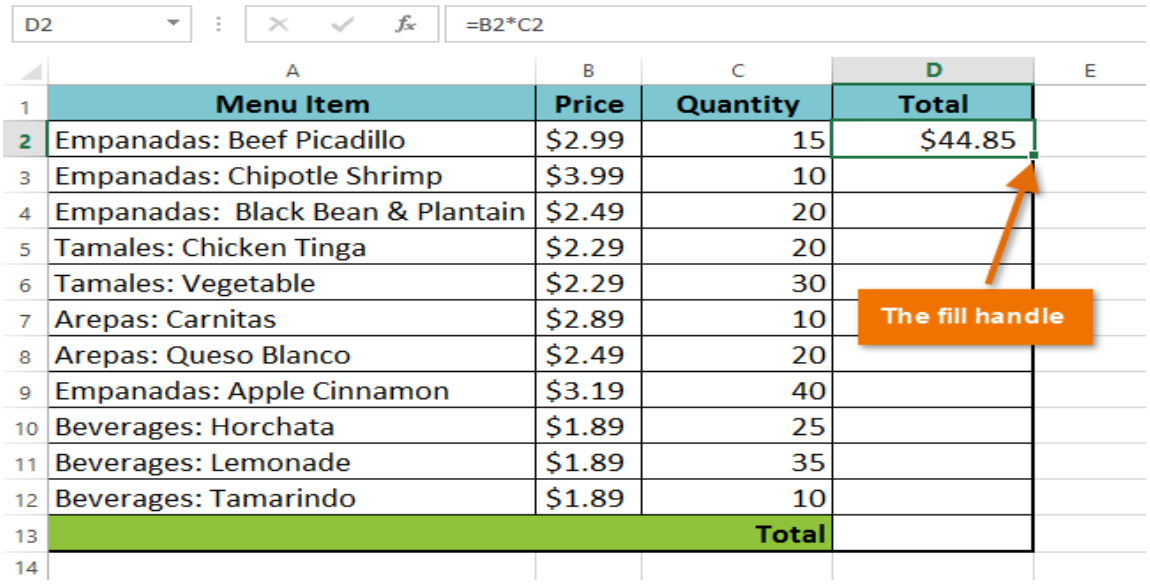
1. Select the **cell** that will contain the formula. In our example, we'll select cell **D2**.

2. Enter the **formula** to calculate the desired value. In our example, we'll type **=B2*C2**.

	A	B	C	D	E
1	Menu Item	Price	Quantity	Total	
2	Empanadas: Beef Picadillo	$2.99	15	=B2*C2	
3	Empanadas: Chipotle Shrimp	$3.99	10		
4	Empanadas: Black Bean & Plantain	$2.49	20		
5	Tamales: Chicken Tinga	$2.29	20		
6	Tamales: Vegetable	$2.29	30		
7	Arepas: Carnitas	$2.89	10		
8	Arepas: Queso Blanco	$2.49	20		
9	Empanadas: Apple Cinnamon	$3.19	40		
10	Beverages: Horchata	$1.89	25		
11	Beverages: Lemonade	$1.89	35		
12	Beverages: Tamarindo	$1.89	10		
13			Total		
14					

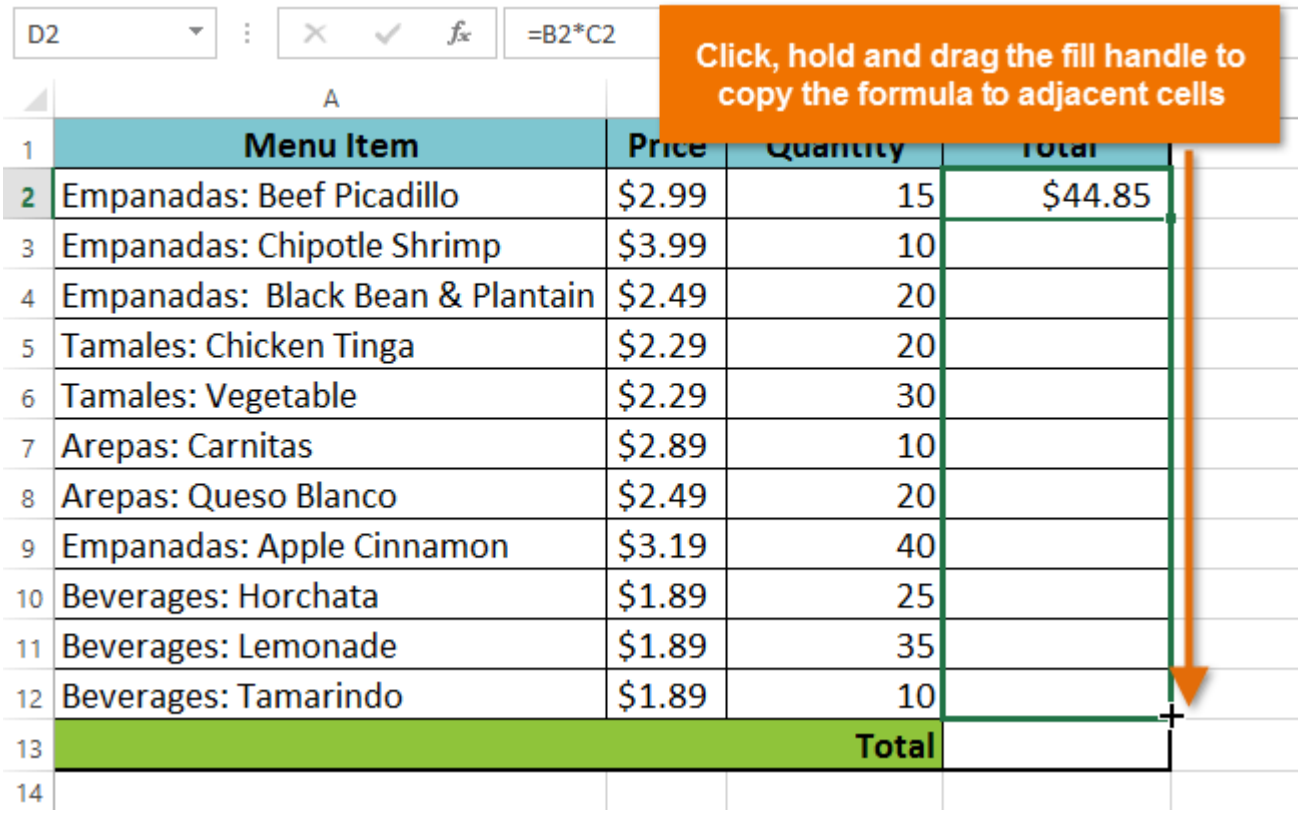
3. Press **Enter** on your keyboard. The formula will be **calculated**, and the result will be displayed in the cell.

4. Locate the **fill handle** in the lower-right corner of the desired cell. In our example, we'll locate the fill handle for cell **D2**.



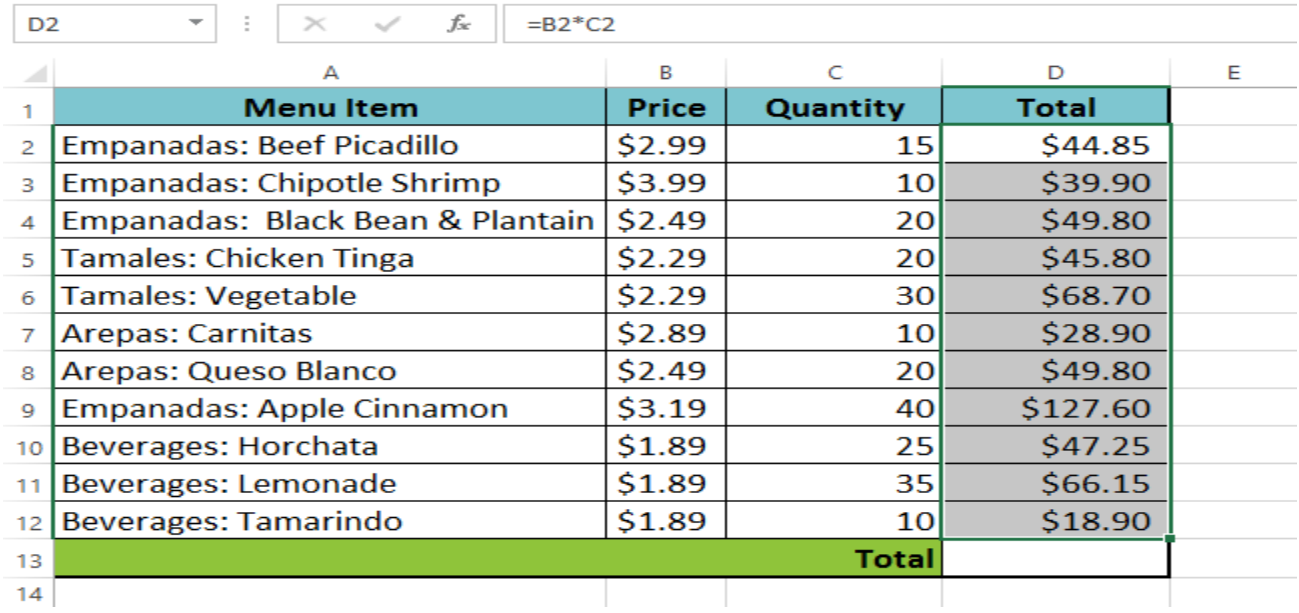
	A	B	C	D	E
1	Menu Item	Price	Quantity	Total	
2	Empanadas: Beef Picadillo	$2.99	15	$44.85	
3	Empanadas: Chipotle Shrimp	$3.99	10		
4	Empanadas: Black Bean & Plantain	$2.49	20		
5	Tamales: Chicken Tinga	$2.29	20		
6	Tamales: Vegetable	$2.29	30		
7	Arepas: Carnitas	$2.89	10		
8	Arepas: Queso Blanco	$2.49	20		
9	Empanadas: Apple Cinnamon	$3.19	40		
10	Beverages: Horchata	$1.89	25		
11	Beverages: Lemonade	$1.89	35		
12	Beverages: Tamarindo	$1.89	10		
13			Total		
14					

5. Click, hold, and drag the **fill handle** over the cells you wish to fill. In our example, we'll select cells **D3:D12**.



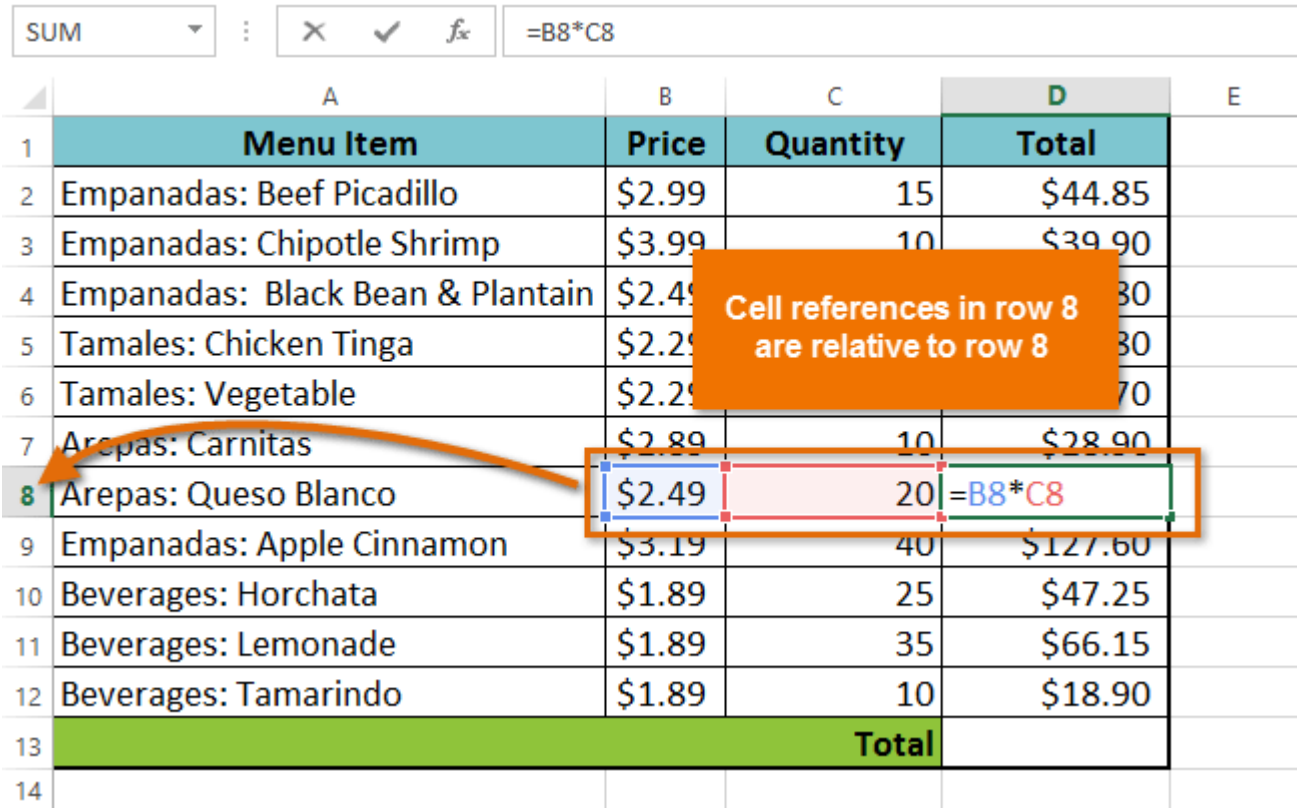
	A	B	C	D
1	Menu Item	Price	Quantity	Total
2	Empanadas: Beef Picadillo	$2.99	15	$44.85
3	Empanadas: Chipotle Shrimp	$3.99	10	
4	Empanadas: Black Bean & Plantain	$2.49	20	
5	Tamales: Chicken Tinga	$2.29	20	
6	Tamales: Vegetable	$2.29	30	
7	Arepas: Carnitas	$2.89	10	
8	Arepas: Queso Blanco	$2.49	20	
9	Empanadas: Apple Cinnamon	$3.19	40	
10	Beverages: Horchata	$1.89	25	
11	Beverages: Lemonade	$1.89	35	
12	Beverages: Tamarindo	$1.89	10	
13			Total	
14				

6. Release the mouse. The formula will be **copied** to the selected cells with **relative references** and the values will be calculated in each cell.



	A	B	C	D	E
1	Menu Item	Price	Quantity	Total	
2	Empanadas: Beef Picadillo	$2.99	15	$44.85	
3	Empanadas: Chipotle Shrimp	$3.99	10	$39.90	
4	Empanadas: Black Bean & Plantain	$2.49	20	$49.80	
5	Tamales: Chicken Tinga	$2.29	20	$45.80	
6	Tamales: Vegetable	$2.29	30	$68.70	
7	Arepas: Carnitas	$2.89	10	$28.90	
8	Arepas: Queso Blanco	$2.49	20	$49.80	
9	Empanadas: Apple Cinnamon	$3.19	40	$127.60	
10	Beverages: Horchata	$1.89	25	$47.25	
11	Beverages: Lemonade	$1.89	35	$66.15	
12	Beverages: Tamarindo	$1.89	10	$18.90	
13			Total		
14					

You can double-click the **filled cells** to check their formulas for accuracy. The relative cell references should be different for each cell, depending on its row.



	A	B	C	D	E
1	**Menu Item**	**Price**	**Quantity**	**Total**	
2	Empanadas: Beef Picadillo	$2.99	15	$44.85	
3	Empanadas: Chipotle Shrimp	$3.99	10	$39.90	
4	Empanadas: Black Bean & Plantain	$2.49		30	
5	Tamales: Chicken Tinga	$2.29		30	
6	Tamales: Vegetable	$2.29		70	
7	Arepas: Carnitas	$2.89	10	$28.90	
8	Arepas: Queso Blanco	$2.49	20	=B8*C8	
9	Empanadas: Apple Cinnamon	$3.19	40	$127.60	
10	Beverages: Horchata	$1.89	25	$47.25	
11	Beverages: Lemonade	$1.89	35	$66.15	
12	Beverages: Tamarindo	$1.89	10	$18.90	
13			**Total**		
14					

Absolute references

There may be times when you do not want a cell reference to change when filling cells. Unlike relative references, **absolute references** do not change when copied or filled. You can use an absolute reference to keep a row and/or column **constant**.

An absolute reference is designated in a formula by the addition of a **dollar sign ($)** before the column and row. If it precedes the column or row (but not both), it's known as a **mixed reference**.

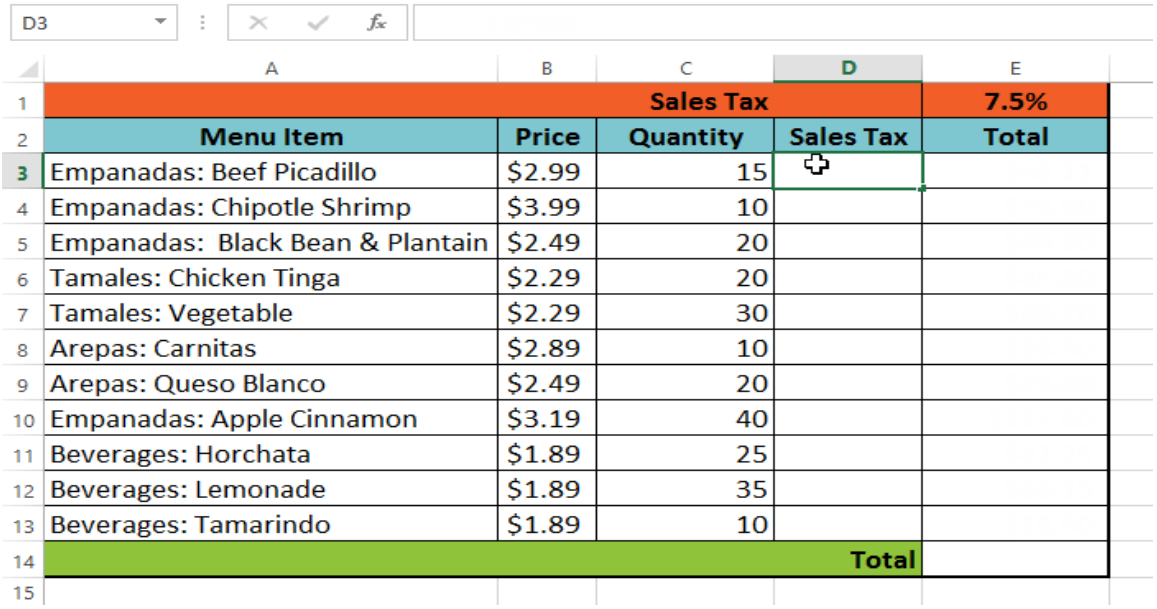
You will use the relative (A2) and absolute (A2) formats in most formulas. Mixed references are used less frequently.

When writing a formula in Microsoft Excel, you can press the **F4** key on your keyboard to switch between relative, absolute, and mixed cell references, as shown in the video below. This is an easy way to quickly insert an absolute reference.

To create and copy a formula using absolute references:

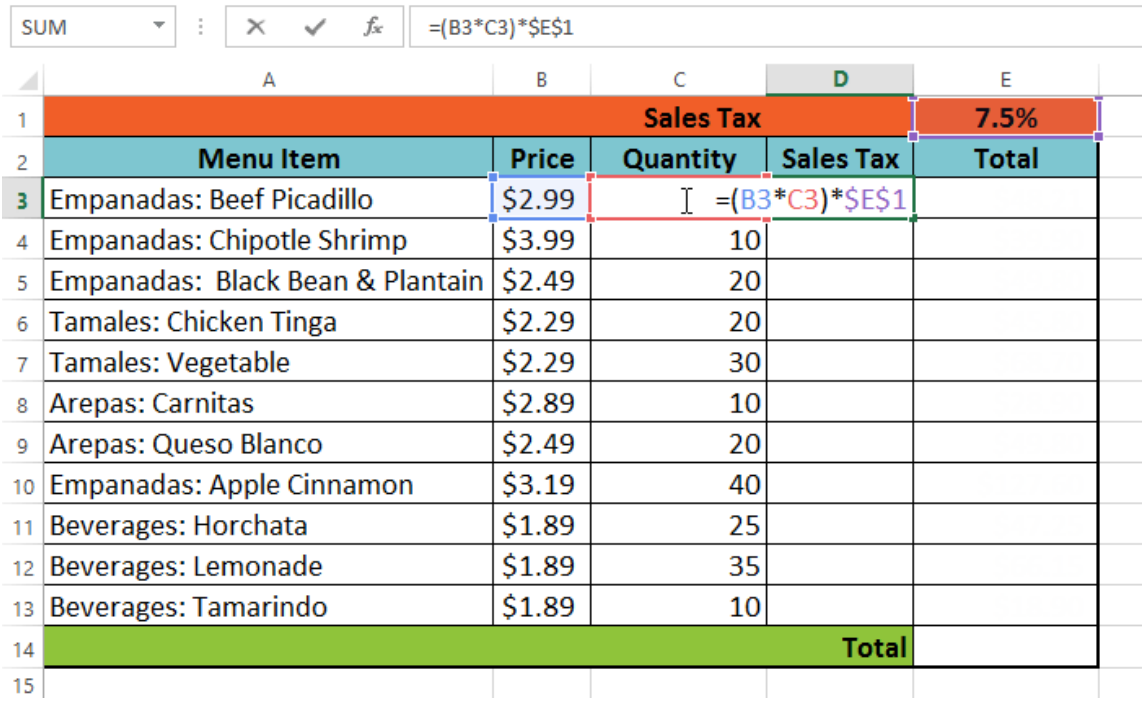
In our example, we'll use the 7.5% sales tax rate in cell **E1** to calculate the sales tax for all items in **column D**. We'll need to use the absolute cell reference **E1** in our formula. Because each formula is using the same tax rate, we want that reference to remain constant when the formula is copied and filled to other cells in column D.

1. Select the **cell** that will contain the formula. In our example, we'll select cell **D3**.



	A	B	C	D	E
1			Sales Tax		7.5%
2	Menu Item	Price	Quantity	Sales Tax	Total
3	Empanadas: Beef Picadillo	$2.99	15		
4	Empanadas: Chipotle Shrimp	$3.99	10		
5	Empanadas: Black Bean & Plantain	$2.49	20		
6	Tamales: Chicken Tinga	$2.29	20		
7	Tamales: Vegetable	$2.29	30		
8	Arepas: Carnitas	$2.89	10		
9	Arepas: Queso Blanco	$2.49	20		
10	Empanadas: Apple Cinnamon	$3.19	40		
11	Beverages: Horchata	$1.89	25		
12	Beverages: Lemonade	$1.89	35		
13	Beverages: Tamarindo	$1.89	10		
14				Total	
15					

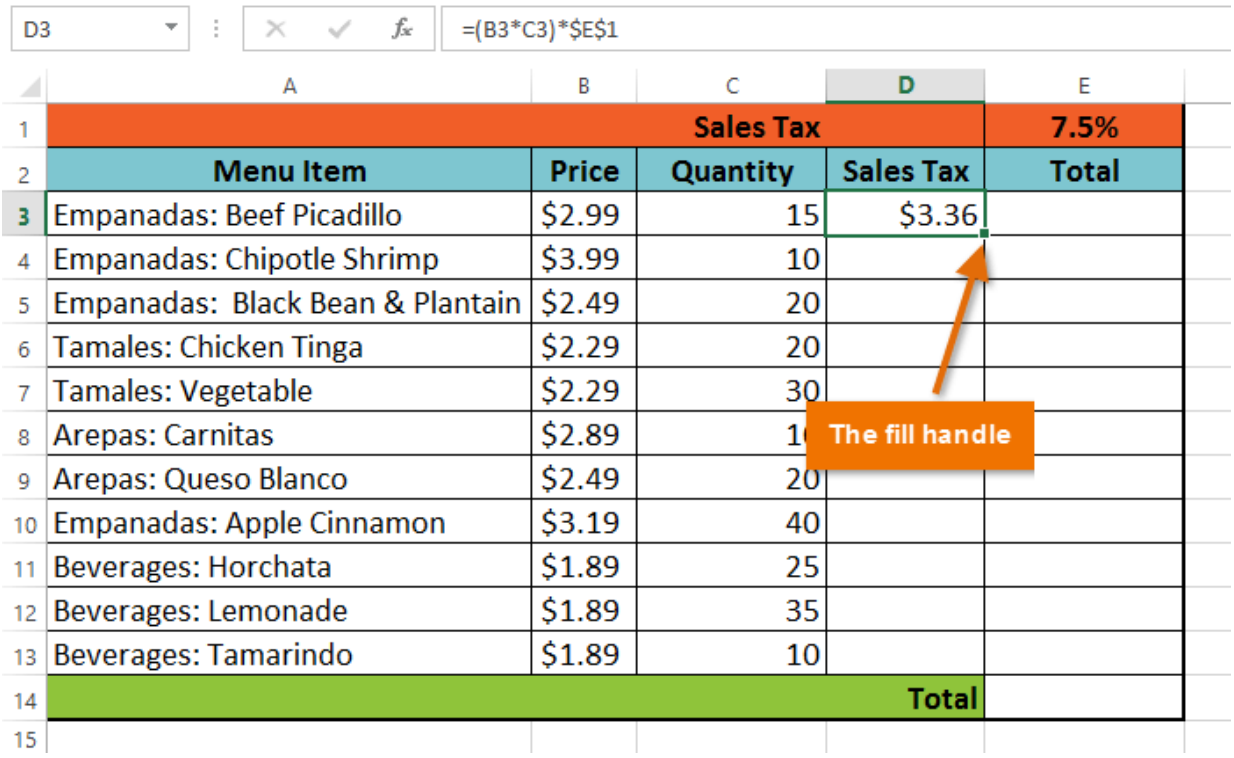
2. Enter the **formula** to calculate the desired value. In our example, we'll type =**(B3*C3)*E1**.



	A	B	C	D	E
1			Sales Tax		7.5%
2	Menu Item	Price	Quantity	Sales Tax	Total
3	Empanadas: Beef Picadillo	$2.99	=(B3*C3)*E1		
4	Empanadas: Chipotle Shrimp	$3.99	10		
5	Empanadas: Black Bean & Plantain	$2.49	20		
6	Tamales: Chicken Tinga	$2.29	20		
7	Tamales: Vegetable	$2.29	30		
8	Arepas: Carnitas	$2.89	10		
9	Arepas: Queso Blanco	$2.49	20		
10	Empanadas: Apple Cinnamon	$3.19	40		
11	Beverages: Horchata	$1.89	25		
12	Beverages: Lemonade	$1.89	35		
13	Beverages: Tamarindo	$1.89	10		
14				Total	
15					

3. Press **Enter** on your keyboard. The formula will calculate, and the result will display in the cell.

4. Locate the **fill handle** in the lower-right corner of the desired cell. In our example, we'll locate the fill handle for cell **D3**.



	A	B	C	D	E
1			Sales Tax		7.5%
2	Menu Item	Price	Quantity	Sales Tax	Total
3	Empanadas: Beef Picadillo	$2.99	15	$3.36	
4	Empanadas: Chipotle Shrimp	$3.99	10		
5	Empanadas: Black Bean & Plantain	$2.49	20		
6	Tamales: Chicken Tinga	$2.29	20		
7	Tamales: Vegetable	$2.29	30		
8	Arepas: Carnitas	$2.89	1		
9	Arepas: Queso Blanco	$2.49	20		
10	Empanadas: Apple Cinnamon	$3.19	40		
11	Beverages: Horchata	$1.89	25		
12	Beverages: Lemonade	$1.89	35		
13	Beverages: Tamarindo	$1.89	10		
14				Total	
15					

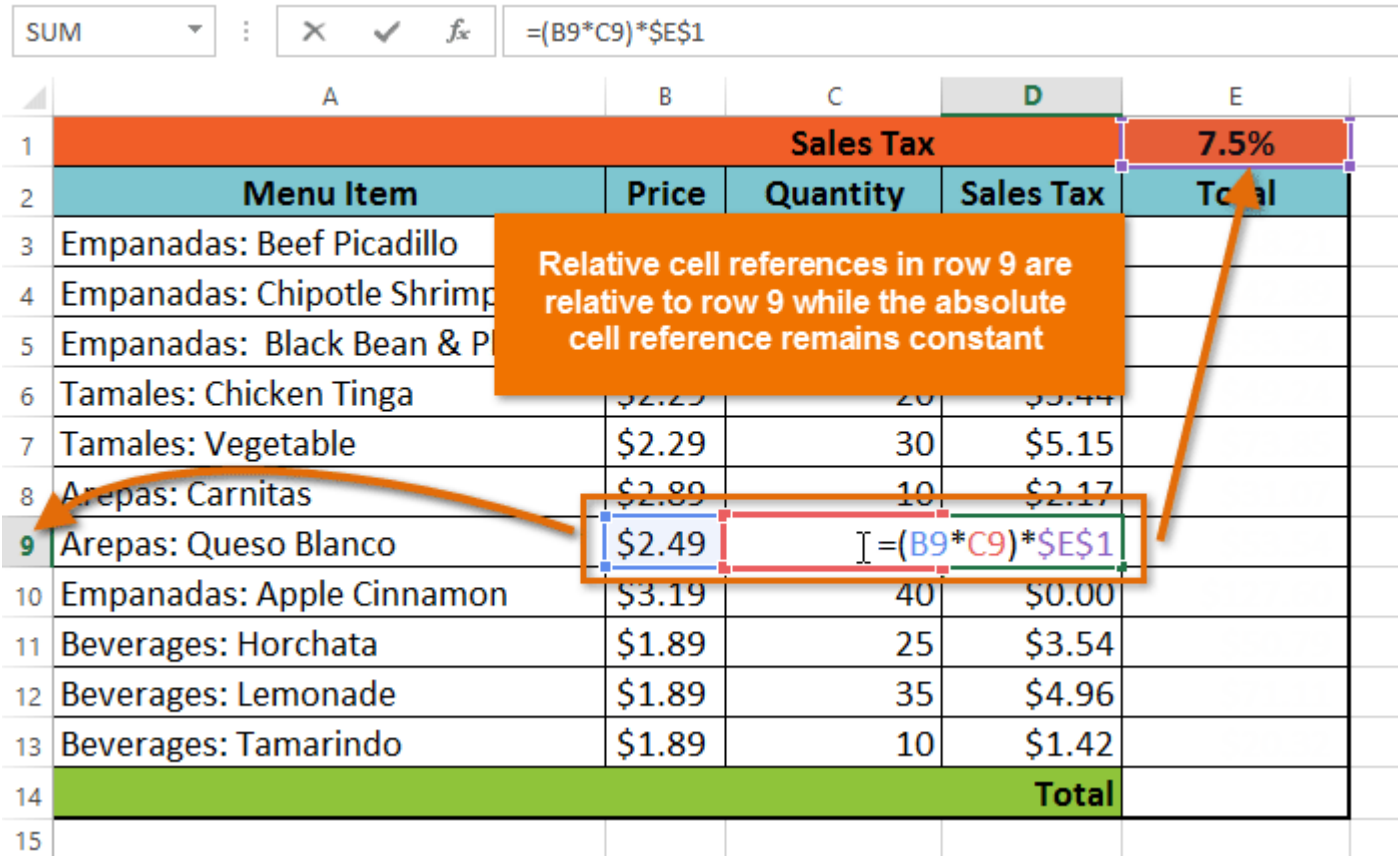
5. Click, hold, and drag the **fill handle** over the cells you wish to fill, cells **D4:D13** in our example.

	A				
1					%
2	Menu Item	Price	Quantity	Sales Tax	Total
3	Empanadas: Beef Picadillo	$2.99	15	$3.36	
4	Empanadas: Chipotle Shrimp	$3.99	10		
5	Empanadas: Black Bean & Plantain	$2.49	20		
6	Tamales: Chicken Tinga	$2.29	20		
7	Tamales: Vegetable	$2.29	30		
8	Arepas: Carnitas	$2.89	10		
9	Arepas: Queso Blanco	$2.49	20		
10	Empanadas: Apple Cinnamon	$3.19	40		
11	Beverages: Horchata	$1.89	25		
12	Beverages: Lemonade	$1.89	35		
13	Beverages: Tamarindo	$1.89	10		
14				Total	
15					

6. Release the mouse. The formula will be **copied** to the selected cells with an **absolute reference**, and the values will be calculated in each cell.

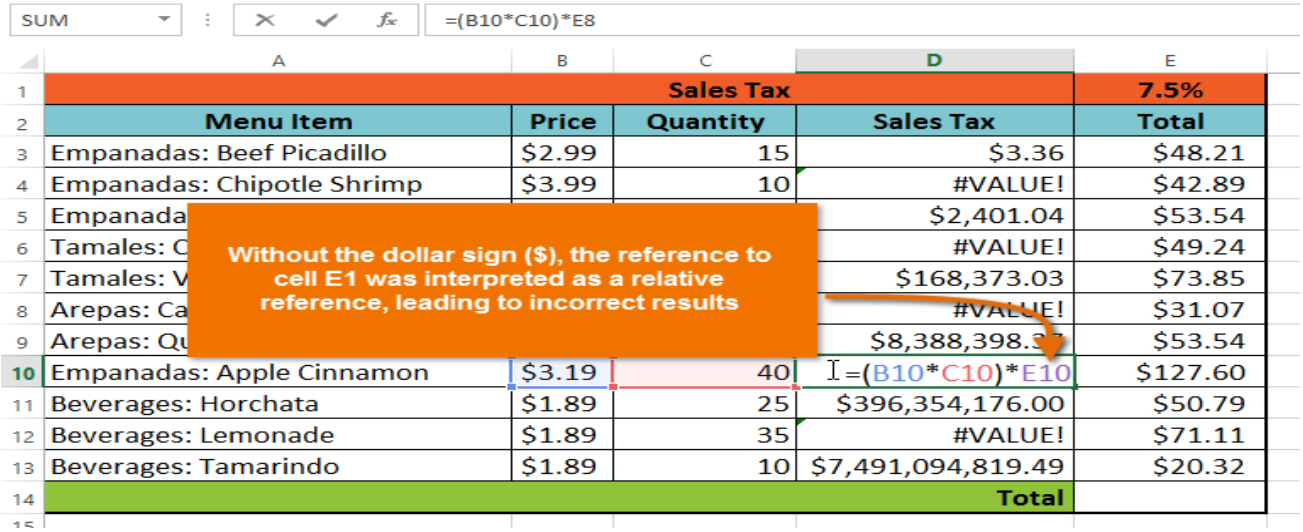
	A	B	C	D	E
1				Sales Tax	7.5%
2	Menu Item	Price	Quantity	Sales Tax	Total
3	Empanadas: Beef Picadillo	$2.99	15	$3.36	
4	Empanadas: Chipotle Shrimp	$3.99	10	$2.99	
5	Empanadas: Black Bean & Plantain	$2.49	20	$3.74	
6	Tamales: Chicken Tinga	$2.29	20	$3.44	
7	Tamales: Vegetable	$2.29	30	$5.15	
8	Arepas: Carnitas	$2.89	10	$2.17	
9	Arepas: Queso Blanco	$2.49	20	$3.74	
10	Empanadas: Apple Cinnamon	$3.19	40	$9.57	
11	Beverages: Horchata	$1.89	25	$3.54	
12	Beverages: Lemonade	$1.89	35	$4.96	
13	Beverages: Tamarindo	$1.89	10	$1.42	
14				Total	
15					

You can double-click the **filled cells** to check their formulas for accuracy. The absolute reference should be the same for each cell, while the other references are relative to the cell's row.



	A	B	C	D	E
1				Sales Tax	7.5%
2	Menu Item	Price	Quantity	Sales Tax	Total
3	Empanadas: Beef Picadillo				
4	Empanadas: Chipotle Shrimp				
5	Empanadas: Black Bean & P				
6	Tamales: Chicken Tinga				
7	Tamales: Vegetable	$2.29	30	$5.15	
8	Arepas: Carnitas				
9	Arepas: Queso Blanco	$2.49		=(B9*C9)*E1	
10	Empanadas: Apple Cinnamon	$3.19	40	$0.00	
11	Beverages: Horchata	$1.89	25	$3.54	
12	Beverages: Lemonade	$1.89	35	$4.96	
13	Beverages: Tamarindo	$1.89	10	$1.42	
14				Total	
15					

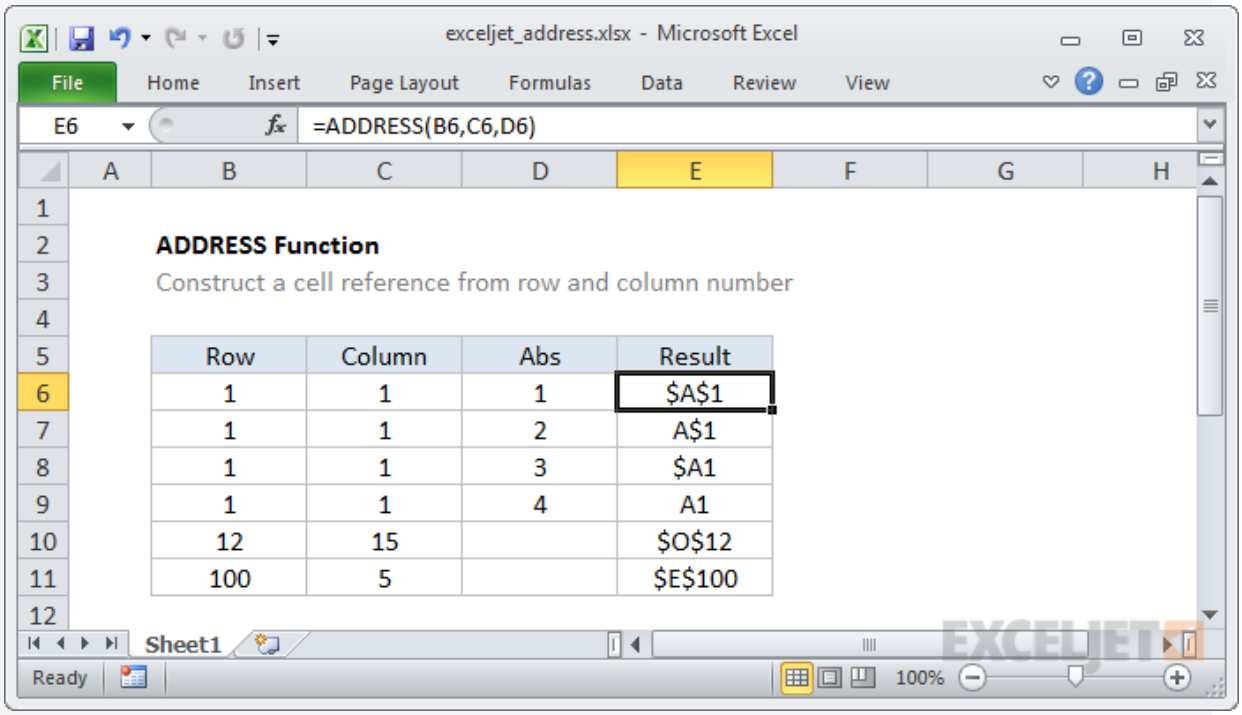
Be sure to include the **dollar sign** ($) whenever you're making an absolute reference across multiple cells. The dollar signs were omitted in the example below. This caused the spreadsheet to interpret it as a relative reference, producing an incorrect result when copied to other cells.



	A	B	C	D	E
1				Sales Tax	7.5%
2	Menu Item	Price	Quantity	Sales Tax	Total
3	Empanadas: Beef Picadillo	$2.99	15	$3.36	$48.21
4	Empanadas: Chipotle Shrimp	$3.99	10	#VALUE!	$42.89
5	Empanada			$2,401.04	$53.54
6	Tamales: C			#VALUE!	$49.24
7	Tamales: V			$168,373.03	$73.85
8	Arepas: Ca			#VALUE!	$31.07
9	Arepas: Qu			$8,388,398.5	$53.54
10	Empanadas: Apple Cinnamon	$3.19	40	=(B10*C10)*E10	$127.60
11	Beverages: Horchata	$1.89	25	$396,354,176.00	$50.79
12	Beverages: Lemonade	$1.89	35	#VALUE!	$71.11
13	Beverages: Tamarindo	$1.89	10	$7,491,094,819.49	$20.32
14				Total	

*Cell address

Excel ADDRESS Function



Summary

The Excel ADDRESS function returns the address for a cell based on a given row and column number. For example, =ADDRESS(1,1) returns A1. ADDRESS can return an address in relative or absolute format, and can be used to construct a cell reference inside a formula.

Purpose

Create a cell address from a given row and column

Return value

A cell address in the current or given worksheet.

Syntax

=ADDRESS (row_num, col_num, [abs_num], [a1], [sheet])

Arguments

- **row_num** - The row number to use in the cell address.
- **col_num** - The column number to use in the cell address.
- **abs_num** - [optional] The address type (i.e. absolute, relative). Defaults to absolute.
- **a1** - [optional] The reference style, A1 vs R1C1. Defaults to A1 style.
- **sheet** - [optional] The name of the worksheet to use. Defaults to current sheet.

Version

- Excel 2003

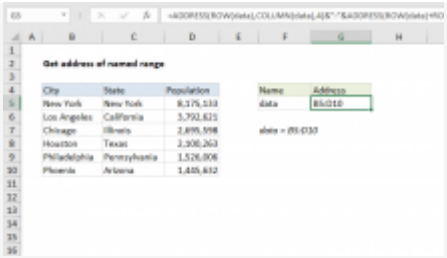
Usage notes

- Use ADDRESS to create an address from a given row and column number. For example:

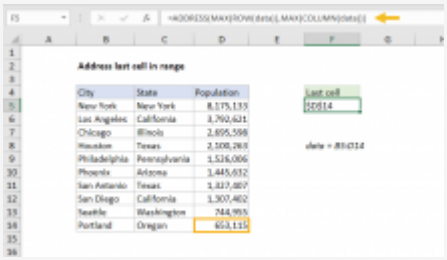
```
ADDRESS(1,1) returns $A$1
ADDRESS(1,1,4) returns A1
```

- **Abs_num** key:
  1 or omitted Absolute
  2 Absolute row; relative column
  3 Relative row; absolute column
  4 Relative

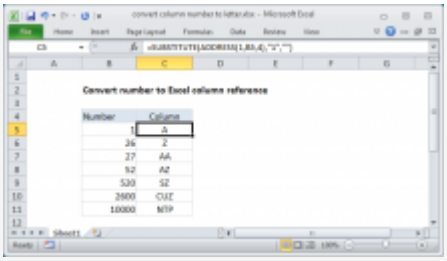
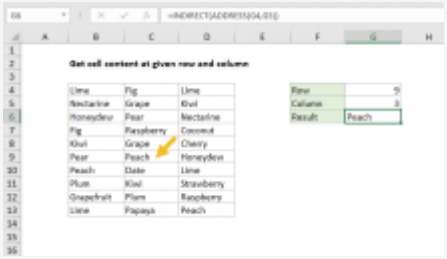
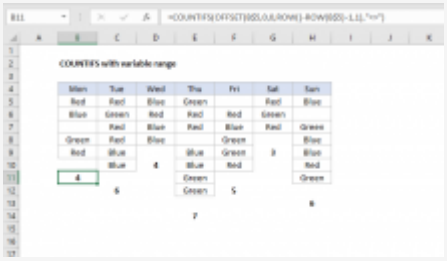
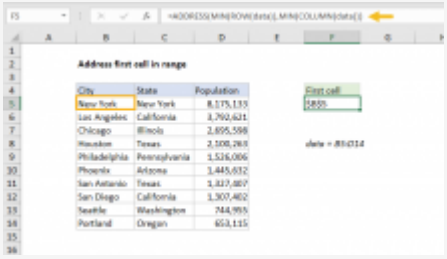
ADDRESS formula examples



- Get address of named range
- The core of this formula is the ADDRESS function, which is used to return a cell address based on a given row and column. Unfortunately, the formula gets somewhat complicated because we need to use ADDRESS twice: once...



- Address of last cell in range
- The ADDRESS function creates a reference based on a given a row and column number. In this case, we want to get the last row and the last column used by the named range data (B5:D14). To get the last row used, we use...

- 
- Convert column number to letter
- The first step is to construct an address that contains the column number. We do this with the ADDRESS function, by providing 1 for row number, a column number from B5, and 4 for the abs_num argument (to get a relative...
- 
- Get cell content at given row and column
- The Excel ADDRESS function returns the address for a cell based on a given row and column number. For example, the ADDRESS function with 1 for both row and column like this: =ADDRESS(1,1) returns "A1" as text....
- 
- COUNTIFS with variable range
- In the example shown, the formula in B11 is: =COUNTIFS(OFFSET(B$5,0,0,ROW()-ROW(B$5)-1,1),"<>") Working from the inside out, the work of setting up a variable range is done by the OFFSET function...
- 
- Address of first cell in range
- The ADDRESS function creates a reference based on a given a row and column number. In this case, we want to get the first row and the first column used by the named range data (B5:D14). To get the first row used, we...

Q14. a) What tools are available to customize our PowerPoint presentation?

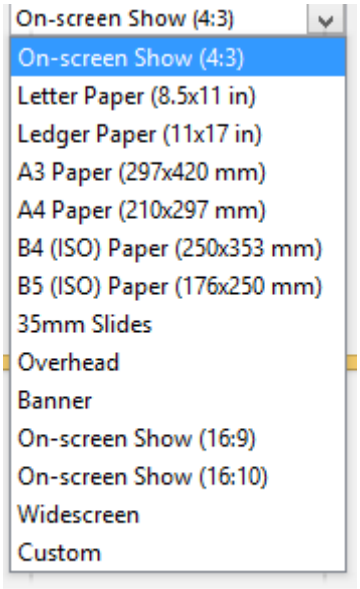
- PowerPoint is a very practical presentation tool. But no matter how many times you have worked with PowerPoint before, there are a few tips and tricks that can help customize your presentation. The first part of this article will explain how to customize presentation options and views and in the second part we will show you how to navigate by using presentation views. Please read on**..**

Customize presentation options

Changing page setup options

Presentations are created mainly to project either on a projector or more and more frequently to a plasma or TV screen. There are times when a presentation can be created for delivery in different formats.

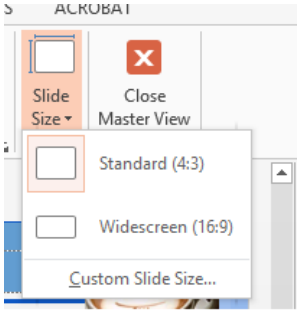
- On-screen show (4:3)
- Letter Paper (8.5 x 11 in)
- Ledger Paper (11 x 17 in)
- A3 Paper (297 x 420 mm)
- A4 Paper (210 x 297 mm)
- B4 (ISO) Paper (250 x 353 mm)
- B5 (ISO) Paper (176 x 250 mm)
- 35mm Slides
- Overhead
- Banner
- On-screen Show (16:9)
- On-screen Show (16:10)
- Widescreen
- Custom



Slide Sizes

To select a slide size other than the standard one:

1. In Slide Master View
2. Click on Slide Size
3. Select from one of the two options
4. For more choices, click Custom
5. Select one of the options



Slide Size

Figure 89- standard or widescreen

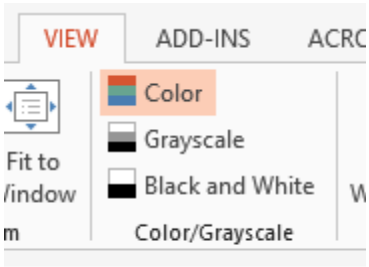
Slide Size box

Figure 90 – other options

If you change the orientation to Portrait for the presentation it will apply to all the slides.

Changing to view in color/grayscale

Why change to view the presentation in grayscale? You might want to print the presentation and to print in colour is more expensive than printing to greyscale, so you need to see what the presentation looks like in grayscale before you print.



View Grayscale

Figure 91- colour/grayscale options

On the View Ribbon, click on the option you want, Colour, Grayscale or Black and White.

Then from the Grayscale Ribbon select the option you want to see:

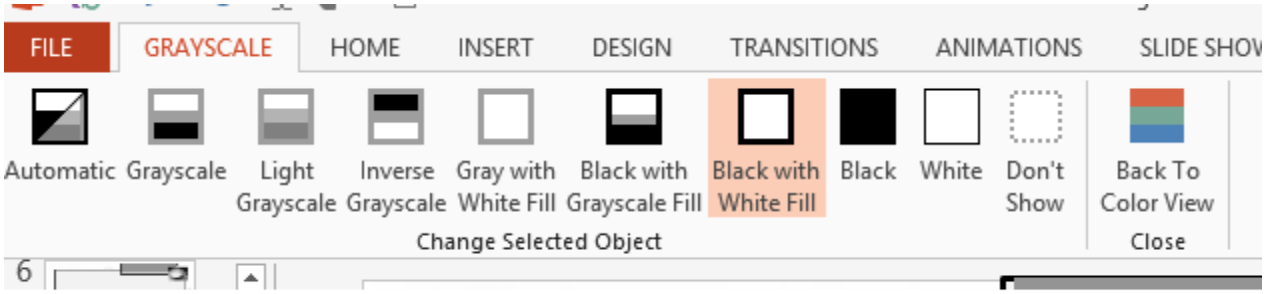


Figure 92- grayscale options

To get back to the colour view, click Back to Colour View.

Navigating using presentation views

There are several different views in PowerPoint as we saw earlier and you can navigate through the presentation in each in different ways.

In Normal View

- Click on the thumbnail of the slide you want to see
- Use the Vertical Scrollbar to move between slides
- Use the up and down arrow keys on the keyboard to move one slide backwards or forwards

In Slide Sorter View

- Click on the slide you want to select
- Use the arrow keys to move up, down, left and right

In Reading View

Use the next and back icons in the status bar to move back or forwards or use the menu which is accessed from the icon in the middle

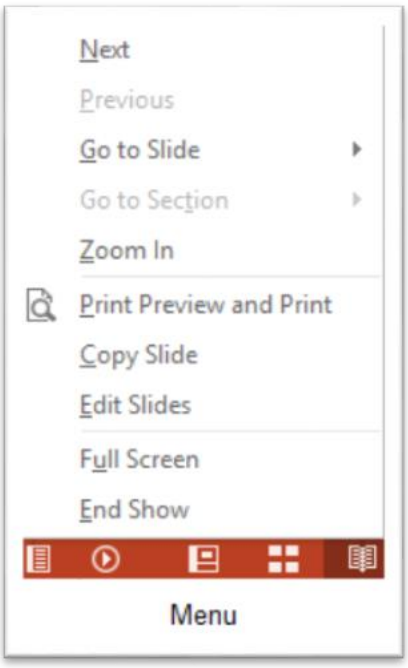


Figure 93- reading view

Pick from the menu – you can use Go to Slide to pick the slide number

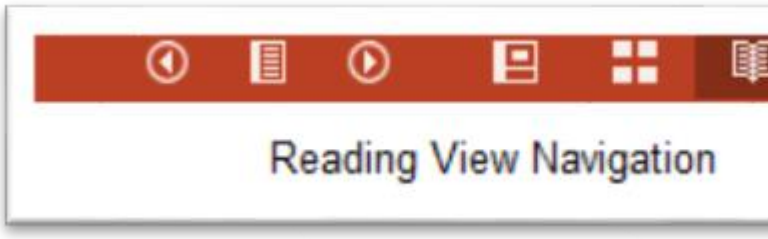


Figure 94 – icons

Back and Next icons move between slides.

In Slide Show view

When presenting you can use the mouse or the arrows on the keyboard to move through the presentation one slide at a time.

You can also type the number of the slide you want to see and press Enter.

When you hover the mouse over the bottom left corner of the slide on display you will notice some faint icons, there is a back arrow and forward arrow which move you through one slide at a time.

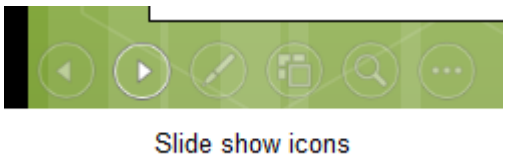
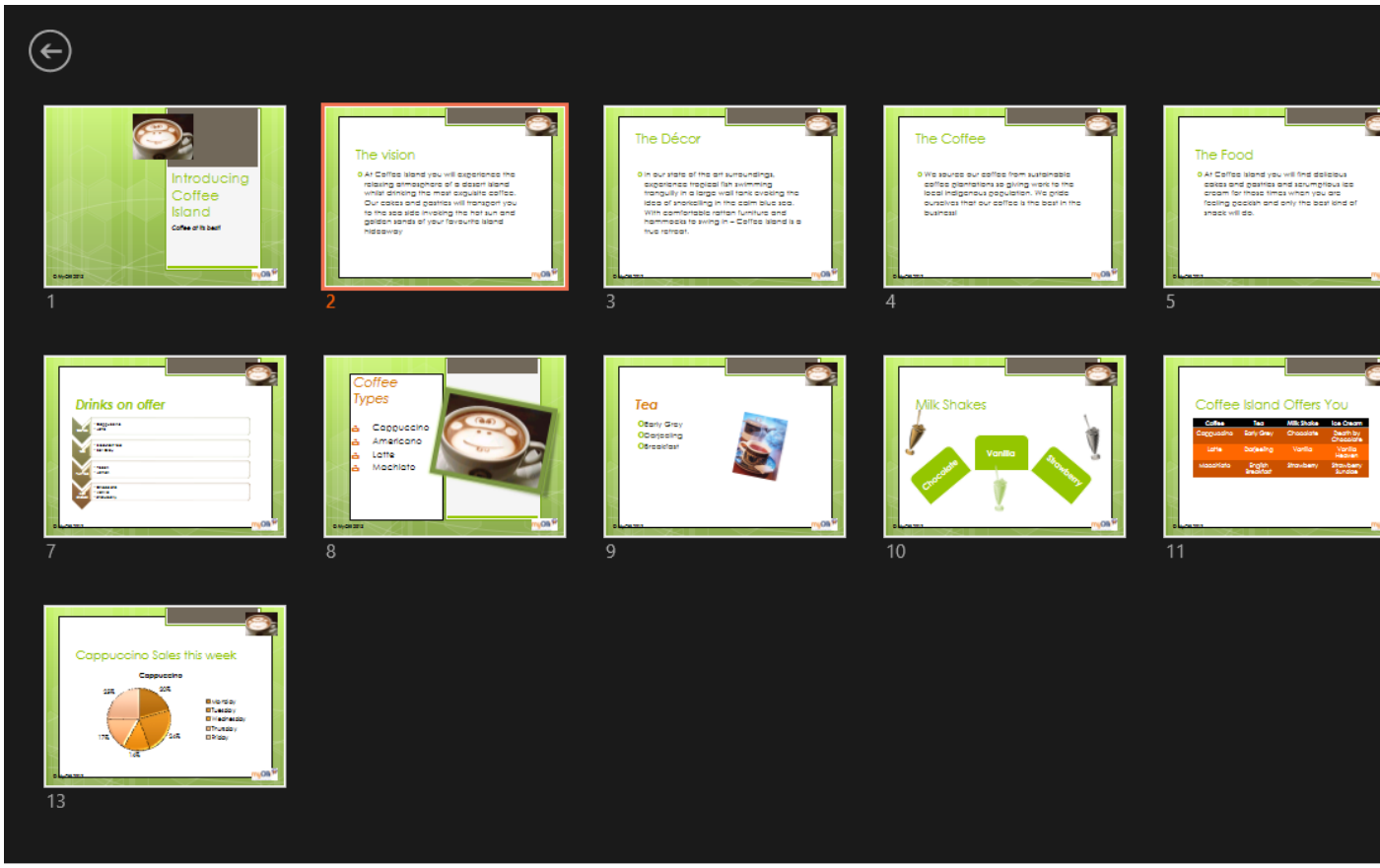


Figure 95- slide show icons

Use the fourth icon along to show the slides in a presentation view of Slide Sorter View. This lays the slides on the screen and you can click on the one you want to see on the one you want to see



Slide Sorter In Presentation View

Figure 96- Slide Sorter in presentation view

Use the back arrow at the top left to get back to the slide you started from.

To end the slide show, press the Escape Key on the keyboard – this takes you back to PowerPoint in the edit mode which means that your audience will see the back end of your presentation.

You can also use the End Presentation option which is on the small ellipse icon on the bottom left of the slide when you hover the mouse.

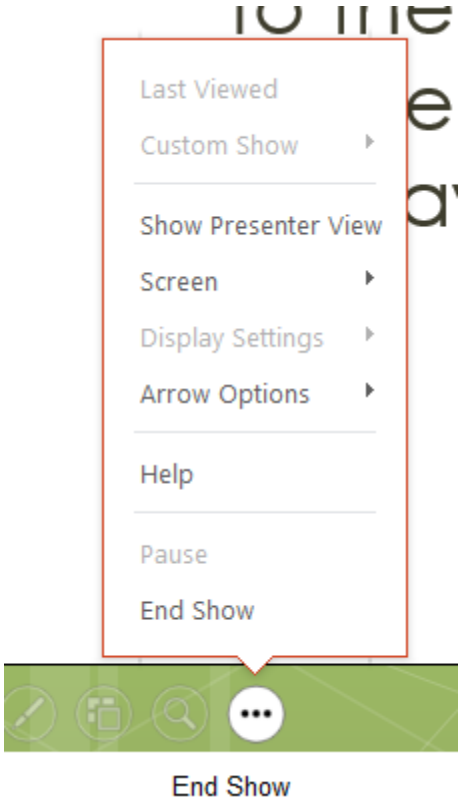
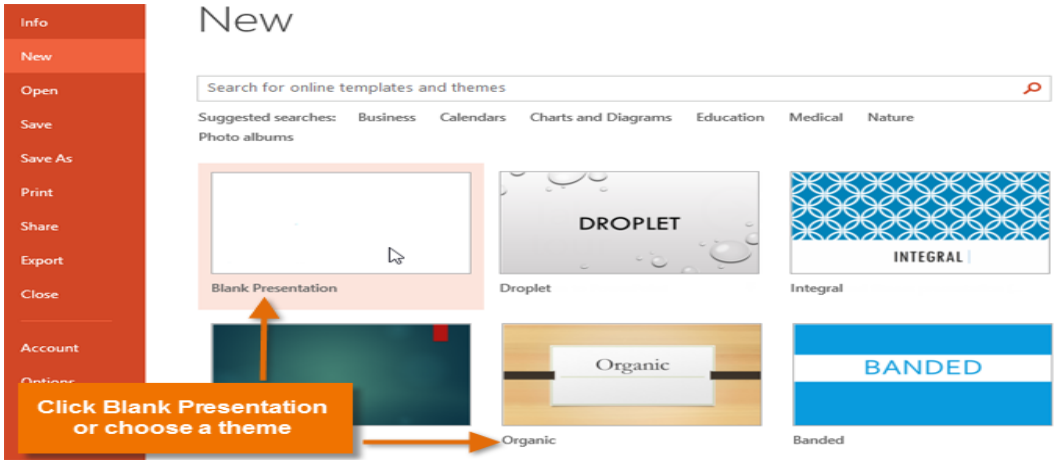


Figure 97- end show and stay in presentation mode

Q14 b) Write the steps for the following action for creation of power point presentation

Open a Blank presentation

1. Select the **File** tab to go to **Backstage view**.
2. Select **New** on the left side of the window, then click **Blank Presentation** or choose a **theme**.

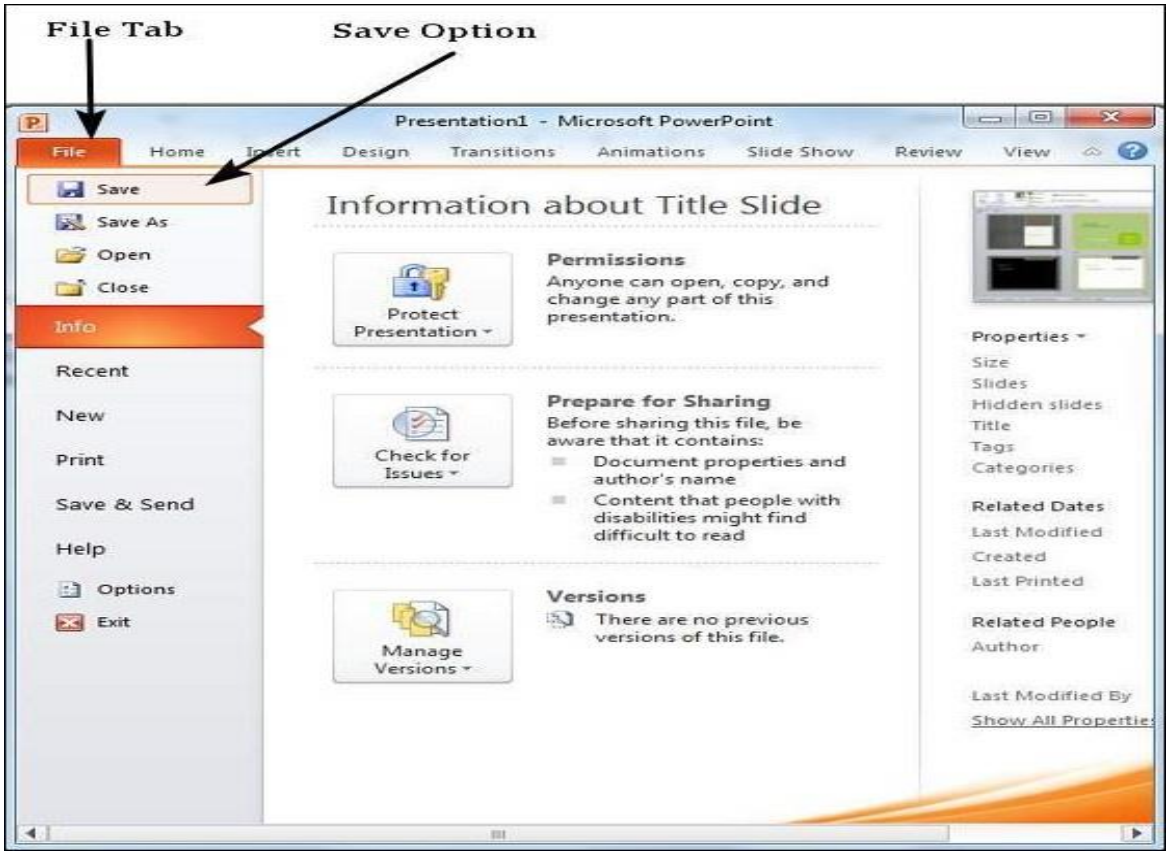


☐ Save the presentation as Lab1.pptx

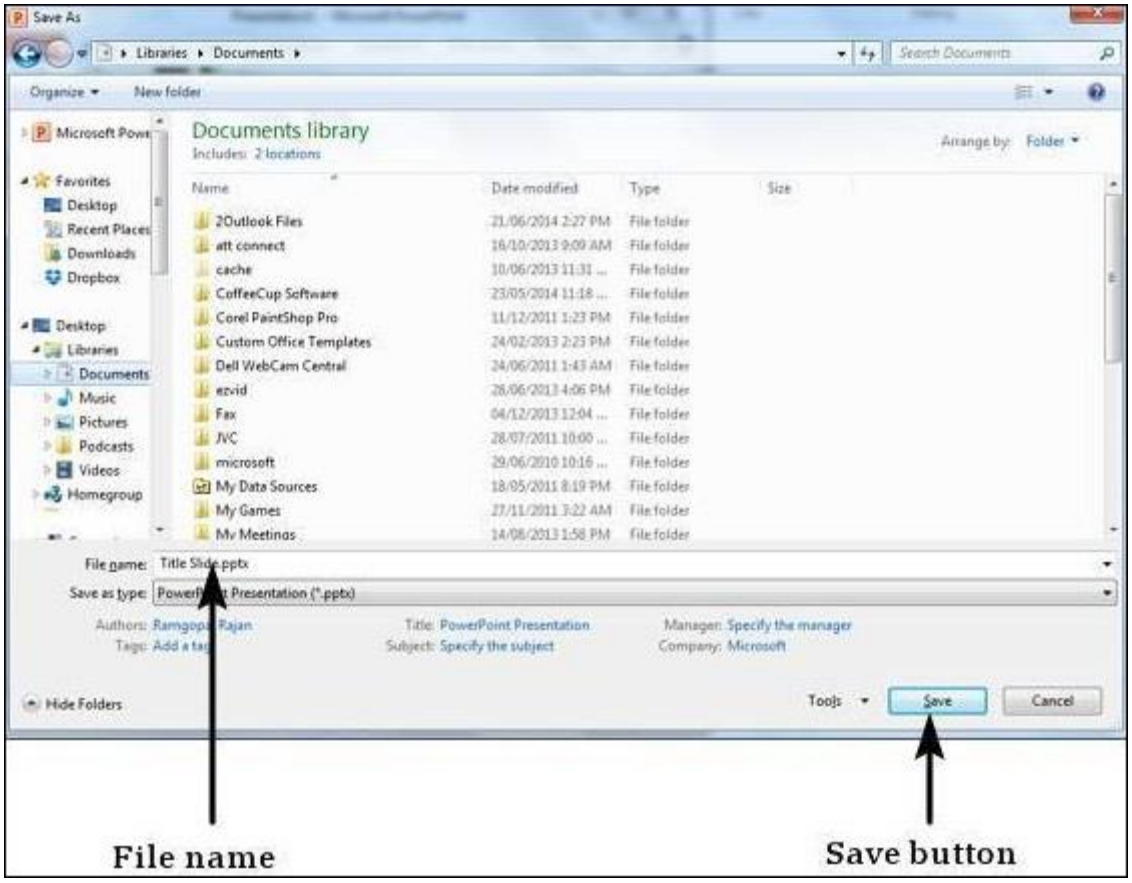
Saving Presentation in Powerpoint

One of the most basic tasks in PowerPoint is being able to save your work; this is probably the most important task as well. There are many users who have burnt their fingers for not saving their work in time and losing hours of hard work. The following are the basic steps to save a presentation.

Step 1 − Click on the **File** tab to launch the **Backstage** view and select **Save**.



Step 2 − In the **Save As** dialog, type in the file name and click "Save".



Step 3 − The default file format is **.pptx**. If you want to save the file with a different name, choose one of the file types from the "**Save as type**" dropdown list.

☐ **Add a Title to the first slide: the name of your college**

Title a slide

PowerPoint for Microsoft 365 PowerPoint for Microsoft 365 for Mac *More...*

There are multiple way to add titles to your slides in PowerPoint. Use the **Layout** option to create a standalone title slide or to add a title to a slide that contains other text. You can also use the Outline view to create and update the titles of your slides

Type your first name and last name in the Subtitle section

First name Last name

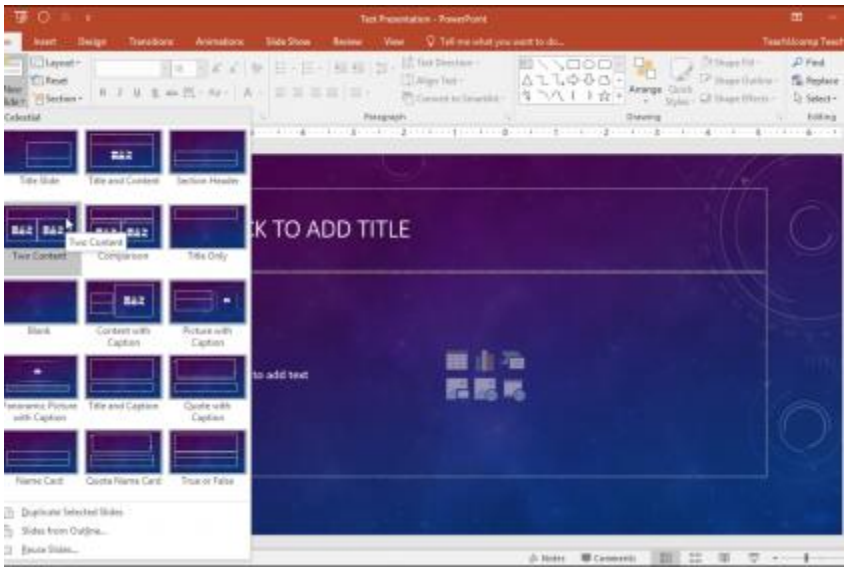
Institutional affiliation (in original language) English), Country (in English) Abstract A short abstract (summary) of your contribution is inserted here. Please limit this to 300 words. Do not use references, footnotes or images in this section. It should be as concise as possible. It should be complete, self paper itself. The abstract should be informative, giving the scope and emphasizing the main conclusions, results, or significance of the work described. Use verdana, 10, italic to write this part of the text. Keywords: Maximum 5. Use Subheading (if necessary) Full papers will be published in conference proceeding Only papers formatted according to the guidelines indicated in this document can be accepted for publication. The other condition for paper is registered for the conference. Additionally, a signed “copyright license agreement” form must be sent at the same time of the paper submission. Paper guidlines Please change ‘language’ in the ‘tools’ The average length of a paper Please set all notes at the end of page, in Arabic numbers sequentially throughout the article with a superscript numeral corresponding to the list of notes placed at the end. Footnotes should A maximum of 5 images can be included in the text. 1 Please don’t use footnotes to bibliographic references. Institutional affiliation (in original language) / Institutional affiliation (in English) A short abstract (summary) of your contribution is inserted here. Please limit this to 300 words. Do not use references, footnotes or images in this section. It should be as concise as possible. It should be complete, self-explanatory and should not requir paper itself. The abstract should be informative, giving the scope and emphasizing the main conclusions, results, or significance of the work described. Use verdana, 10, italic to write Maximum 5. Use arial 10 to write this part of the text. Full papers will be published in conference proceedings. Only papers formatted

according to the guidelines indicated in this document can be n. The other condition for publication is that at least one author of the paper is registered for the conference. Additionally, a signed “copyright license agreement” form must be sent at the same time of Please change ‘language’ in the ‘tools’ menu to UK English. The average length of a paper should be 2500 words plus footnotes. Please set all notes at the end of page, in Arabic numbers1 . Notes should be numbered sequentially throughout the article with a superscript numeral corresponding to the list of notes placed at the end. Footnotes should not be used for citations.

Add a New Slide which has a Title and Content

Insert a New Slide in PowerPoint- Instructions

BY JOSEPH BROWNELL / TUESDAY, JULY 25 2017 / PUBLISHED IN LATEST, MICROSOFT, OFFICE 2013, OFFICE 2016, OFFICE 365, POWERPOINT 2013, POWERPOINT 2016



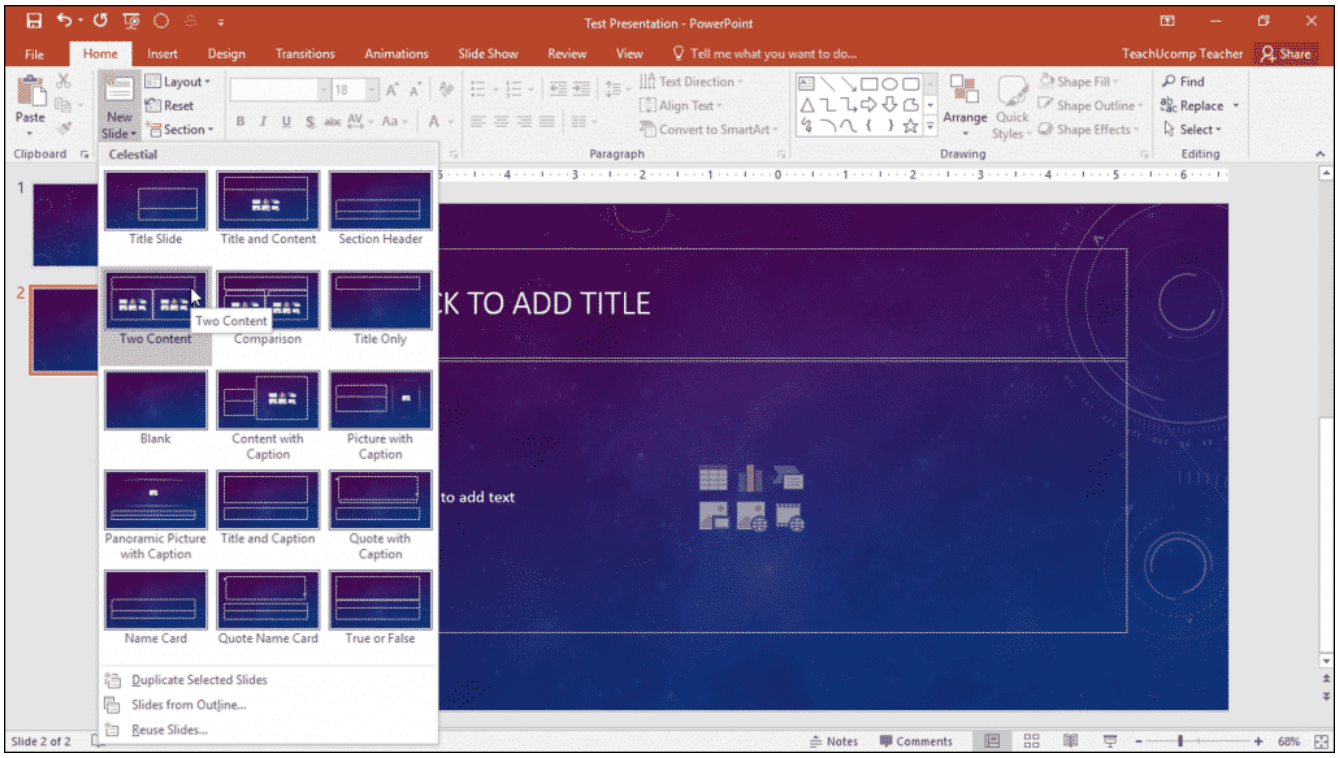
Insert a New Slide in PowerPoint: Overview

In this tutorial, you will learn how to insert a new slide in PowerPoint. When you create a new presentation, PowerPoint gives you one default slide that contains a “Title Slide” layout. You can click into the placeholders shown in the title slide. Then type the text you want to appear as the title and subtitle of your presentation.

To add another presentation slide, you must then insert a new slide and determine which placeholders appear in it. The slide layout you apply determines which placeholders appear within the new slide. However, you can also change the slide layout to change the placeholders after it is applied.

To insert a new slide in PowerPoint with a “Title and Content” slide layout, click the “Home” tab in the Ribbon. Then click the “New Slide” button in the “Slides” button group.

To insert a new slide in PowerPoint with a different slide layout, click the drop-down part of this button. Doing this then shows a drop-down menu that displays the different slide layouts you can apply. You can click one of these slide layouts in the drop-down menu to create a new slide with that layout.



Insert a New Slide in PowerPoint- Instructions: A picture of a user inserting a new slide into a presentation in PowerPoint.

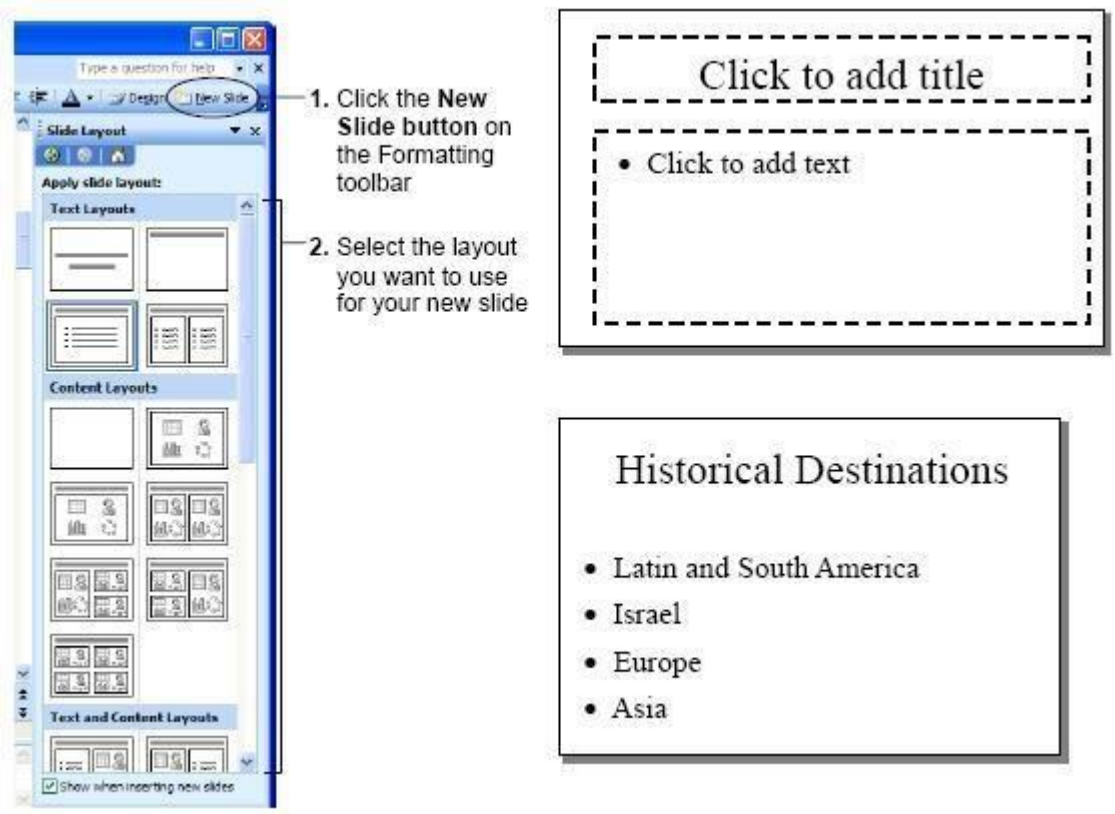
Insert a New Slide in PowerPoint: Instructions

1. **To insert a new slide that contains a "Title and Content" slide layout**, click the "Home" tab in the Ribbon.
2. Then click the "New Slide" button in the "Slides" button group.
3. **To insert a new slide and choose the slide layout**, click the drop-down part of this button.
4. Doing this then shows a drop-down menu that displays the different slide layouts you can apply.
5. Then click one of the slide layouts in the drop-down menu to create a new slide with that layout.

Q15. Write steps for creation of a set of PowerPoint slides that demonstrates your skill to use the tools of PowerPoint. It should include the following things

1. Title slide &bullet list

Creating a simple bulleted list slide



This lesson will walk you through adding a simple bulleted list slide to an existing presentation.

1. Start Microsoft PowerPoint.

2. Open arbitrary existing PowerPoint presentation.

3. Click the New Slide button on the Formatting toolbar.
   The Slide Layout task pane appears as shown in the above figure. The Slide Layout task pane lets you select from numerous layouts that determine what you want to appear on the new slide. We want to add a Bulleted List Slide.

4. Click the Bulleted List layout, as shown in the above figure.
   A new slide appears after the current slide in your presentation as shown in the figure. Notice there are two placeholders on this slide: one for the title of the slide and the other for the bulleted list. To add text to a placeholder, all you have to do is click and type.

5. Click the title placeholder (where it says: “Click to Add Title”).
   An insertion point (▯) appears in the placeholder, indicating that you can add text to the placeholder.

6. Type some text.
   Now let’s add some text to the bulleted list placeholder.

7. Click the bulleted list placeholder and type something and press <Enter>.
   PowerPoint adds another bullet to the list when you press the <Enter> key.

8. Repeat the following three times: Type some text and press <Enter>

9. Click the Slide Layout pane’s Close button.
   If you are not planning to use the Slide Layout Pane again for a while, it is usually a good idea to close it so you can have extra viewing space for your presentation.

2. Inserting Excel Sheet

Insert Excel data in PowerPoint

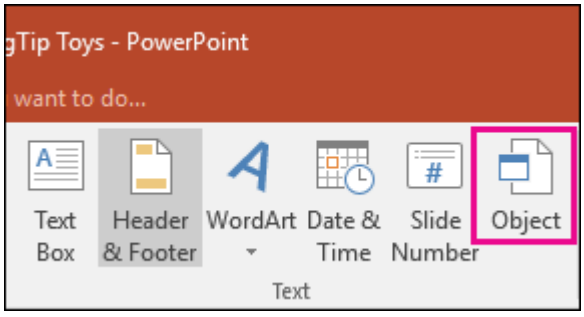
PowerPoint for Microsoft 365 PowerPoint 2019 PowerPoint 2016 PowerPoint 2013 *More...*

If you are using PowerPoint 2013 or a newer version, you can link data from a saved Excel worksheet to your PowerPoint presentation. That way, if data in the worksheet changes, you can easily update it in your PowerPoint presentation.

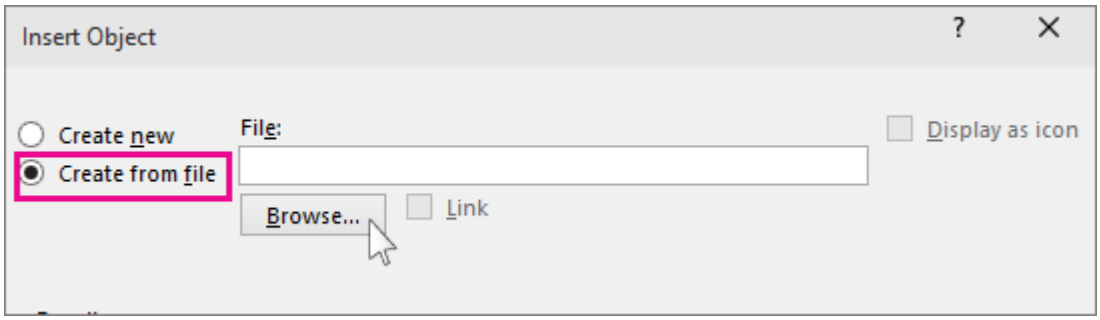
Newer versions2010

Link an entire Excel worksheet to PowerPoint

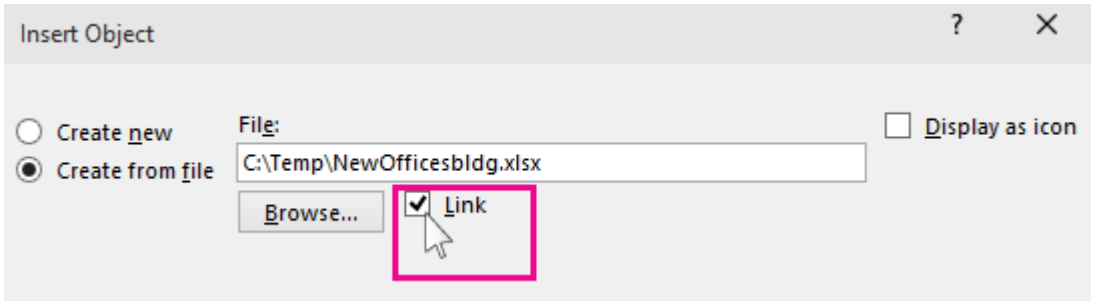
1. In PowerPoint, on the **Insert** tab, click or tap **Object**.



2. In the **Insert Object** dialog box, select **Create from file**.



3. Click or tap **Browse**, and in the **Browse** box, find the Excel workbook with the data you want to insert and link to.
4. Before you close the **Insert Object** box, select **Link**, and click **OK**.

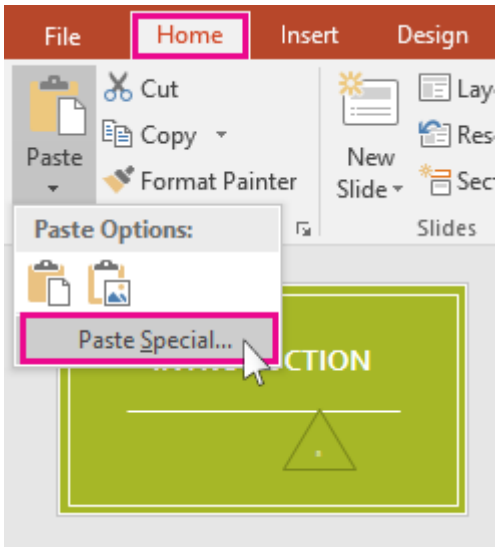


Important: The linked object in your presentation displays all the data from the active, top worksheet in the linked Excel workbook. When you save the Excel workbook, make sure the worksheet you want in your presentation is the one you see when you first open the workbook.

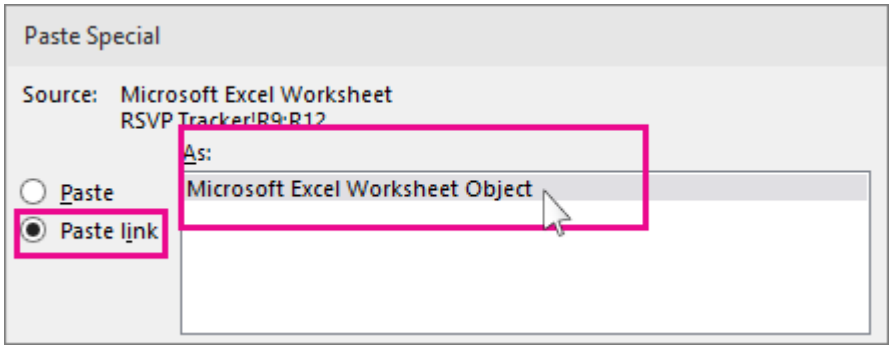
Link a section of data in Excel to PowerPoint

1. In Excel, open the saved workbook with the data you want to insert and link to.

2. Drag over the area of data you want to link to in PowerPoint, and on the **Home** tab, click or tap **Copy**.
3. In PowerPoint, click the slide where you want to paste the copied worksheet data.
4. On the **Home** tab, click the arrow below **Paste**, and select **Paste Special**.



5. In the **Paste Special** box, click **Paste link**, and then, under **As**, select **Microsoft Excel Worksheet Object**.



Copy and paste (unlinked) Excel data in PowerPoint

In this case, the Excel data will not be linked to your PowerPoint presentation. You copy the data from an Excel worksheet and paste it into your presentation. The worksheet does not send automatic updates to PowerPoint.

- **Clip art and Text**

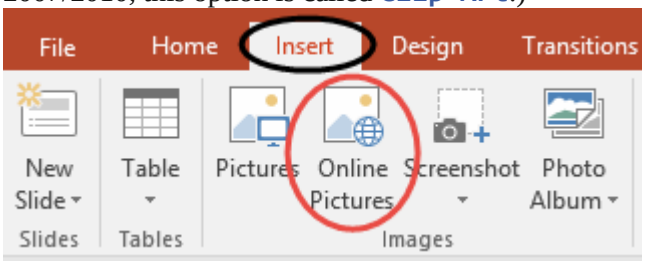
How to Insert Clip Art on a Microsoft PowerPoint Slide

Clip Art is a collection of media files (images, videos, audio, and animation files) that Microsoft includes with the PowerPoint application. If your computer has an Internet connection, then you can also access Bing.com to search for images. To insert clip art on a PowerPoint slide, follow the steps below.

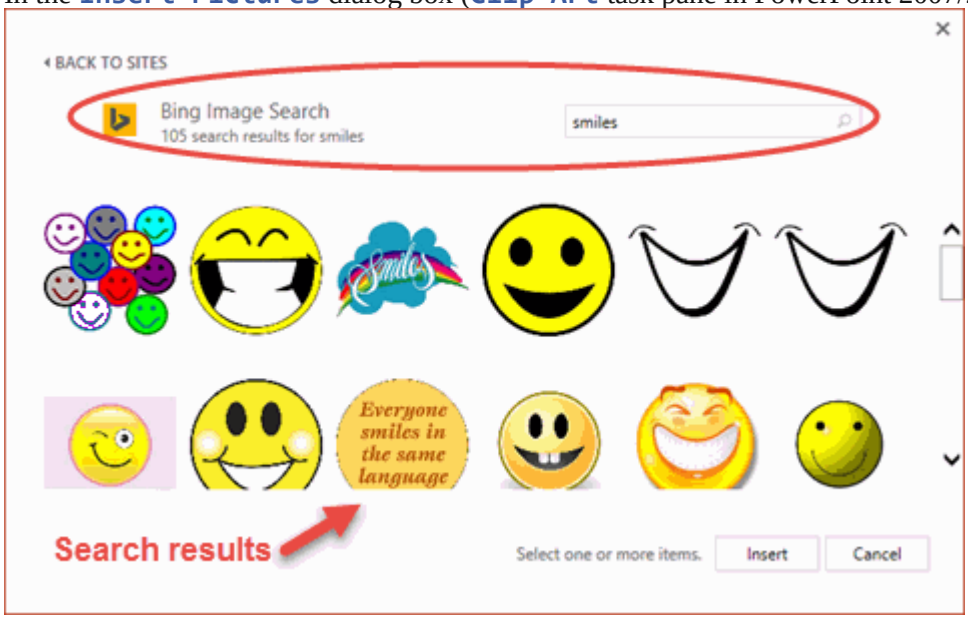
This feature works the same in all modern versions of Microsoft PowerPoint: 2010, 2013, and 2016.

1. Click in the slide where you want to insert a clip art file.

2. On the **Insert** tab, in the **Images** group, click **Online Pictures**. (In PowerPoint 2007/2010, this option is called **Clip Art**.)

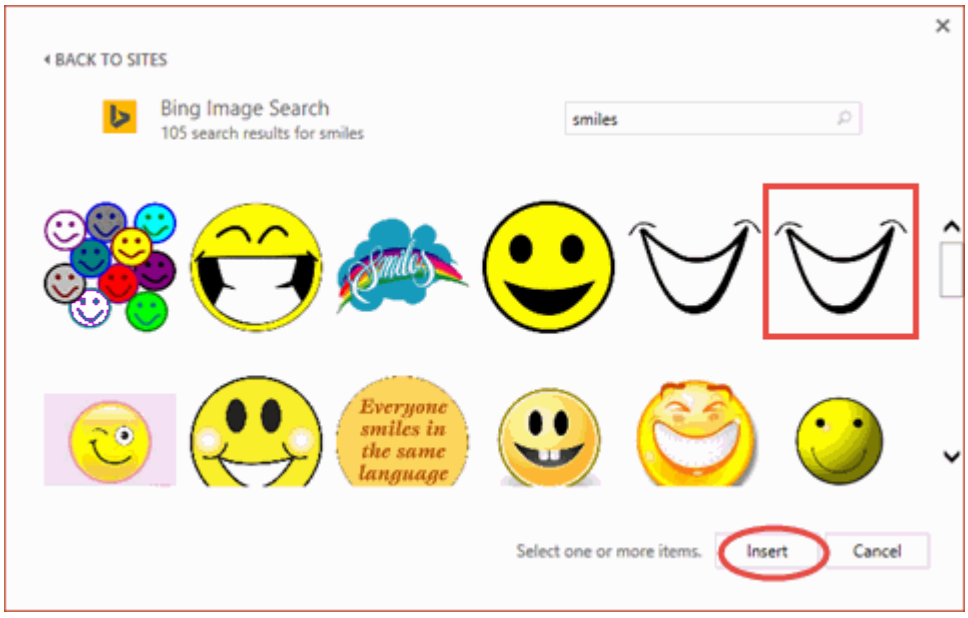


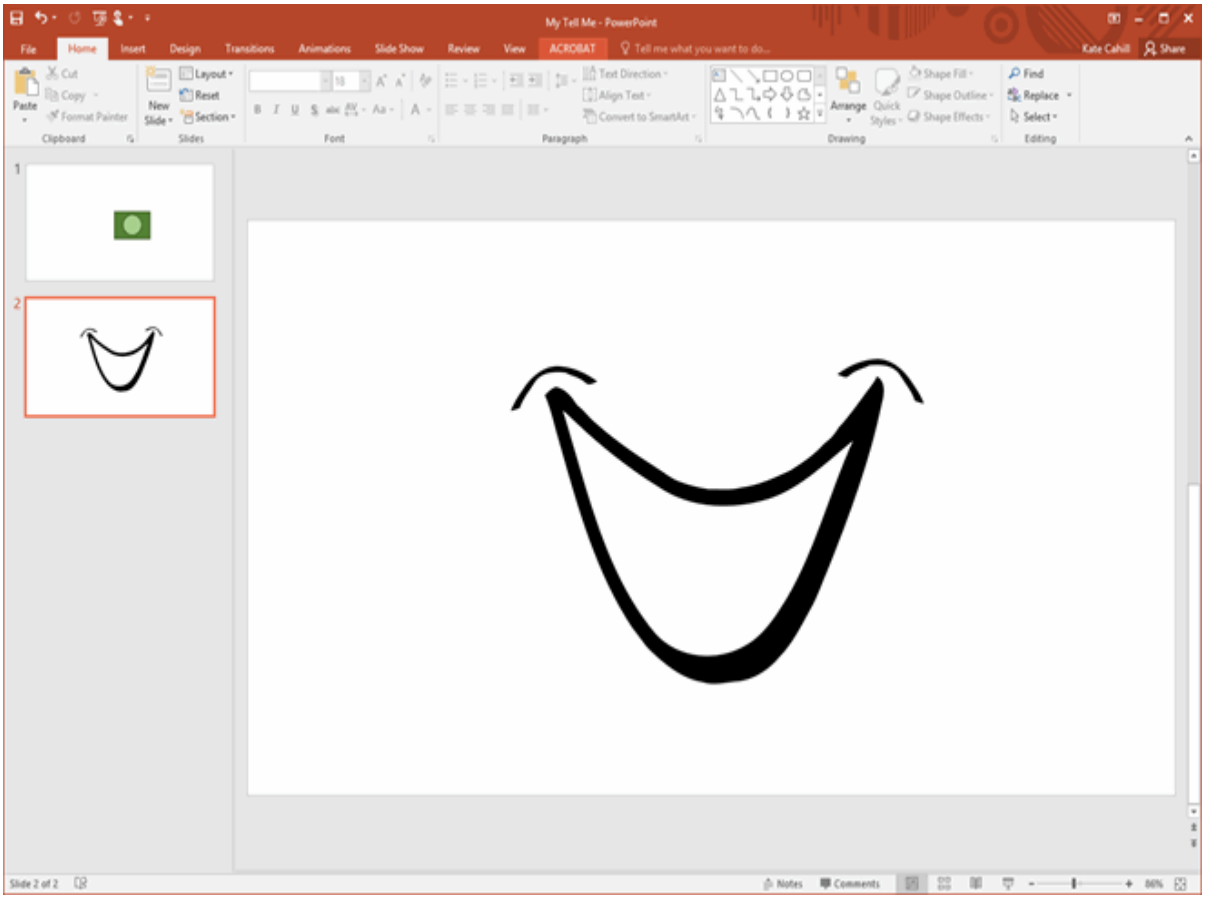
3. In the **Insert Pictures** dialog box (**Clip Art** task pane in PowerPoint 2007/2010), enter



4. Your search results load in the task pane.

5. Locate the clip art you want to insert in your slide and double-click on it or click the item and select **Insert**.





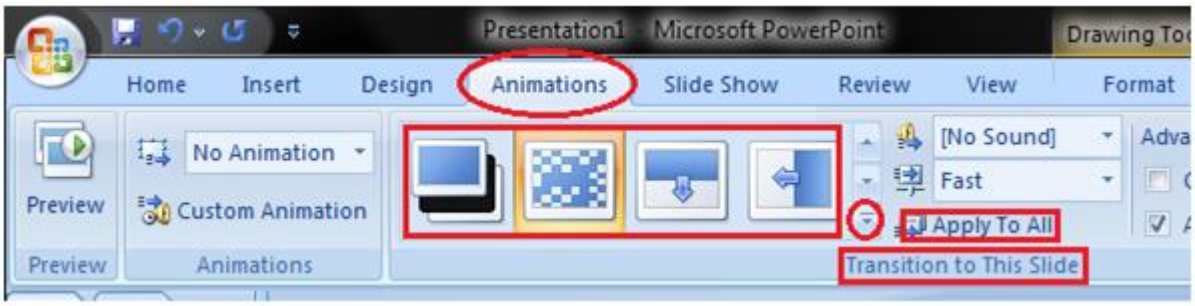
☐ **Slide show effects**

How to Apply Slide Transition Effects

Transition effects appear when one slide changes into next slide in a Slide Show.

- Select the slide to which you want to apply the effect
- Select the Animation tab
- In Transition to This Slide group you will see the transition effects
- Click the drop-down arrow to see menu of transition effects
- Select the desired transition effect
- Click Apply To All to apply the effect to all slides

See the image:


Presentation1 - Microsoft PowerPoint
Drawing To
Home
Insert
Design
Animations
Slide Show
Review
View
Format
Preview
Preview
No Animation
Custom Animation
Animations
[No Sound]
Fast
Apply To All
Transition to This Slide