



ATOMIC ENERGY EDUCATION SOCIETY



CLASS - 6



COMPUTER STUDY MATERIAL



ATOMIC ENERGY EDUCATION SOCIETY

COMPUTER SYLLABUS OF CLASS VI

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Split-up of Syllabus

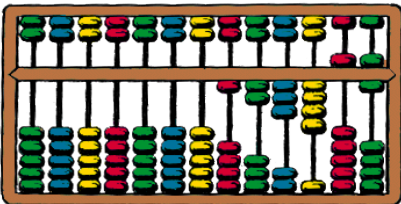

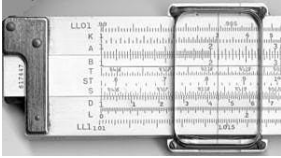


Quarter	Period	Units
I	April to June	1 and 2
II	July to September	3
III	October to December	4 and 5
IV	January to March	6

UNIT 1

FUNDAMENTALS OF COMPUTER

1.1 Review Brief history of computer

The history of computers starts about 2000 years ago in Babylonia (Mesopotamia), at the birth of the abacus and many devices were invented during different periods as listed in the table.

<p>Abacus</p> <p>Chinese invented a calculating device called ABACUS to perform simple addition and subtraction.</p>	 <p>Abacus</p>
<p>Napier's Device</p> <p>John Napier invented a device consisting a set of eleven rods which carried numbers marked on them to perform products and quotients of large numbers.</p>	 <p>Napier's Device</p>
<p>Slide Rule</p> <p>Robert Bissoker invented Slide Rule in 1632, which can perform arithmetic and trigonometric functions.</p>	 <p>Slide rule</p>
<p>Pascal's Calculating Machine (Pascaline)</p> <p>Blaise Pascal developed a mechanical calculating machine. It was the first real desktop calculating device. It consists of a set of toothed wheels on which digits were engraved form 0 to 9. Arithmetic operations were performed by turning the wheels.</p>	 <p>Pascal's Calculating Machine</p>
<p>Punched card machine</p> <p>Joseph Marie Jacquard invented the first punched card machine to control textile looms.</p>	 <p>Punched Card Machine</p>

Charles babbage's Engines (1792-1871)

Charles Babbage invented **Difference Engine**, which could evaluate accurately algebraic expressions and mathematical tasks upto 20 decimal places.

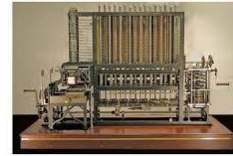
The modified device was called **Analytical Engine**. It was an automatic computing machine.

The parts and principle of Analytical engine is similar to today's computer. Hence, Charles Babbage is called the "**Father of Computer**".



Charles babbage's Engine

Charles Babbage: Analytical Engine 1837



Analytical Engine

Mark-I Digital Computer

Howard Aiken invented the first electro-mechanical computer in 1937. It used the punched cards and the principles of computer as stated by Charles Babbage. It could multiply two 20 digit numbers within 5 seconds. Made lot of noise. Occupied several rooms.



Mark-I Digital Computer

Atanasoff Berry Computer (ABC)

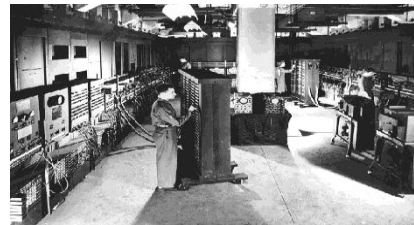
The First Electronic Computer (ABC) was developed by John Vincent Atanasoff and Clifford Berry. This used Vacuum Tubes for storage, arithmetic and logical functions. It could perform 5000 additions and 350 multiplications in 1 second.



Atanasoff Berry Computer

ENIAC (Electronic Numerical Integrator and Calculator)

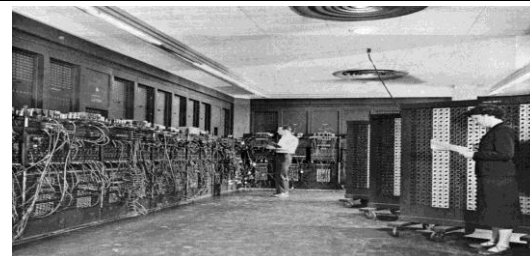
Presper Eckert and John Mauchly developed it in 1940. It used 18,000 vacuum tubes, 70,000 resistors, 10,000 capacitors and 60,000 switches weighted 27 tons and occupied over 5,000 square feet of space. It consumed 150 KW of power.




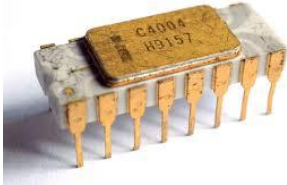

ENIAC

EDVAC (Electronic Discrete Variable Automatic Computer)

The first stored program electronic computer was developed in 1949 using Neumann's idea of stored program concept.



EDVAC

<p>UNIVAC (Universal Automatic Computer)</p> <p>It was developed by Eckert and Mauchly during 1946 to 1951. It was the first commercially available computer.</p>	 <p>UNIVAC</p>
<p>Microprocessor</p> <p>The first micro processor chip INTEL 4004 was developed in 1971 by INTEL Corporation. It laid the foundation for the development of Personal Computer.</p>	 <p>INTEL 4004</p>
<p>Personal computers</p> <p>The first personal computer was developed in 1974.</p>	 <p>Personal computer</p>

1.2 Basic components of computer

- There are three major units of Computer.
 1. Input Unit
 2. Central Processing Unit (CPU)
 3. Output Unit

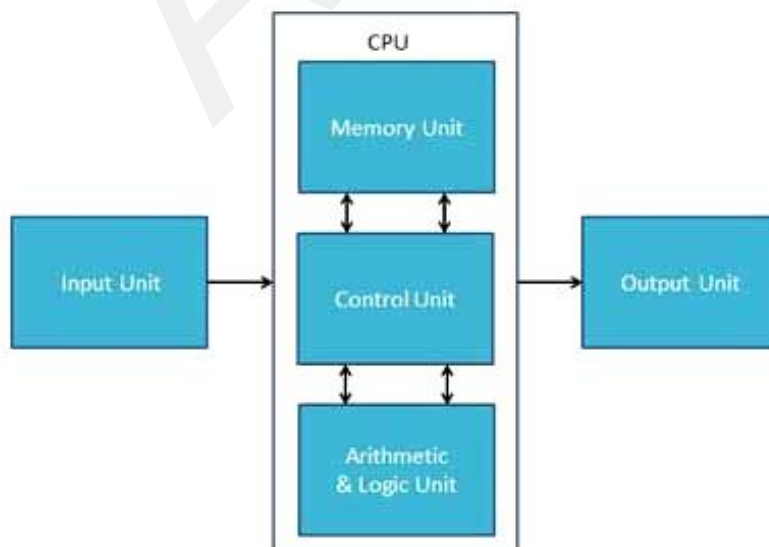


Figure 1.1: Components of computer

Input Unit

- Input Unit accepts the input data from the user via input devices such as Keyboard, Mouse.
- Other input devices will be discussed in chapter 1.3.

Central Processing Unit

CPU consists of three subsystems,

1. Memory Unit
2. Control Unit
3. Arithmetic and Logical Unit

Memory Unit

- Memory Unit stores the data and information.
- Basic unit of memory is bit.
- A bit can hold only one of two values: 0 or 1.
- Units derived from bits are,

1 bit = Binary Digit (0 or 1)

8 bits = 1 byte

1024 bytes = 1 KB (Kilo byte)

1024 KB = 1 MB (Mega byte)

1024 MB = 1 GB (Giga byte)

1024 GB = 1 TB (Terra byte)

1024 TB = 1 PB (Peta byte)

There are different types of Memory that will be discussed in chapter 1.6.

Control Unit

- Control unit generates signals that direct the operation of memory and datapath.
- The control signals, instructs the memory to send or receive data, instructs the ALU about the operations to perform and route data between parts of the datapath.

Arithmetic and Logical Unit

- ALU performs arithmetic operations such as addition, subtraction, multiplication and division.

- It also performs logical operations such as AND, OR, NOT.

Output Unit

- Output unit is used to display the output via output devices such as monitor, projector.
- Other output devices will be discussed in chapter 1.3.

1.3 Different I/O Devices

Input Devices

- Input devices are used to get data and instructions from the user.
- These devices convert data and instructions to a form that can be recognized by the computer (ie, binary language)

Types of Input devices

- Keyboard
- Mouse
- Scanner
- Joystick
- Digital Camera



Figure 1.2 : Input Devices

Keyboard

- Keyboard is the most commonly used input device. Used to enter data and instructions.
- It converts keystrokes into electrical signals that a computer can understand.
- Types of keyboard are
 - Standard keyboard
 - Multimedia keyboard
 - Wireless keyboard

Mouse

- Mouse is the most popular point-and-draw device.
- Types of mouse
 - Mechanical mouse
 - Optical mouse

Scanner

A scanner is an electronic device which can capture from physical items and convert them into digital formats, which in turn can be stored in a computer.

- Common scanner devices are,
 - **MICR (Magnetic Ink Character Recognition)** : Used by banks to find the genuinity of the cheques.
 - **OMR (Optical Mark Reader) scanner:** Used to evaluate OMR sheets.
 - **OCR (Optical Character Recognition) scanner:** Used to read printed characters from the hard copy and convert into softcopy.
 - **Barcode reader** : Used to read the barcode of the products and get the details about it in the stores.
 - **QR Code (Quick Response Code):** It is an advanced version of Barcode designed in 1994. It consists of black squares arranged in a square grid on a white background, which can be read by an imaging device. QR code can be scanned using a smartphone, no need of any specific device. It can be scanned from any direction. Due to the extremely fast scanning facility, it is now widely used to get to websites quicker and it can also be used for advertisements.

Joystick

- Used to control player movements in the video games.

Digital cameras

- Used to create image of an object in digital form that can be stored and interpreted by the computer.

Output Devices

Output devices are used to display the output or to take hardcopy of the output.

Types of output devices

- Monitor
- Printer
- Plotter
- Projector
- Speakers

Monitor

- Monitors are used to display the output.
- Types of Monitor
 - CRT (Cathod Ray Tube) Monitor
 - LCD (Liquid Crystal Display) Monitor

Printer

- Printers are used to produce hard copy (print on paper) of the documents or images.
- Types of printers will be discussed in chapter 1.7.

Plotter

- Plotters are like printers but used to print graphic output of varying size.
- Used to print Blue print , Maps.

Projector

- Used to project information from a computer on a large screen.

Speakers

- Speakers are used to listen audio files.

1.4 Computer Languages

A Computer language includes various languages that are used to communicate with a Computer machine. A Computer can understand only binary language.

Types of Computer Language

- Low level language
- High level Language

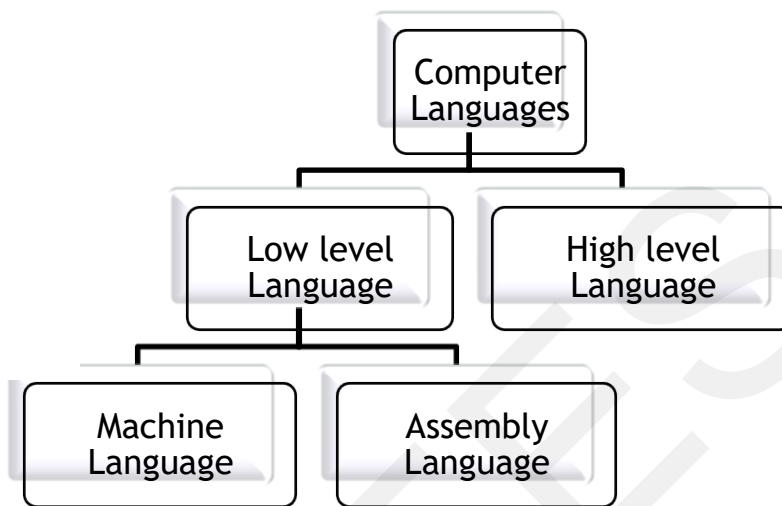


Figure 1.3: Types of Computer Languages

Low level Language

- Low level languages are the machine codes in which the instructions are given in machine language in the form of 0 and 1 to a Computer system.
- Low level languages are divided into two types
 - Machine language
 - Assembly language

Machine language

- **Machine language** is written in machine code which represents 0 and 1 binary digits inside the Computer string which makes it easy to understand and perform the operations.
- An advantage of using Machine language is that there is no need of a translator or an interpreter to translate the code, as the Computer directly can understand.

- Disadvantages of using Machine language is that it is difficult to remember the operation codes, memory address and also hard to find errors in a written program. It is machine dependent.

Assembly Language

- Assembly Languages are written using Mnemonic codes.
- A **mnemonic** is a symbolic name for a single executable machine language instruction (an opcode) and there is at least one opcode **mnemonic** defined for each machine language.
- An assembler is used to convert assembly level language into machine level language.

High level Language

- High level languages look similar to the English language, and hence are better understood by the programmers.
- The translator may be an interpreter and Compiler, helps to convert high level language into binary code for a Computer to understand.
- There are various high level programming languages like FORTRAN , COBOL and Pascal.

1.5 Software definition and its types

Software

A set of programs to perform a particular task is called Software.

There are two types of Software

1. System Software
2. Application Software

System Software

A set of program used to control and co-ordinate the computer system is called System software. For example Operating System, Device Drivers , System Utilities, etc.,

• Device drivers

- A device driver is a system software developed to allow interaction with hardware devices. This acts as an interface for communicating with the device, connected to the CPU.

- **System Utilities**

- **Utility software** is system software used to analyze, configure, optimize or maintain a computer. Examples for system utilities are Anti-Virus, Backup software, Disk Cleaners and Disk Formatters.
- **Anti-virus** utilities scan for computer viruses and remove them.
- **Backup software** makes copies of all information stored on a disk and restores either the entire disk (e.g. in an event of disk failure) or selected files (e.g. in an event of accidental deletion).
- **Disk cleaners** find files that are unnecessary to computer operation, or take up considerable amounts of space. Disk cleaner helps the user to decide what to delete when their hard disk is full.
- **Disk formatters** prepares a data storage device such as a hard disk drive, solid-state drive, floppy disk or USB flash drive for initial use.

- **Operating System**

An **operating system (OS)** is a system software that manages computer hardware and software resources and provides common services for computer programs.

Functions of Operating System

- **Booting:** Booting is a process of starting the computer operating system. It starts the computer to work. It checks the computer and makes it ready to work.
- **Memory Management :** In multiprogramming, the OS allocates memory to the individual process as required
- **Disk Management :** Operating system manages the disk space. It manages the stored files and folders in a proper way.
- **Process Management :** CPU can perform one task at one time. If there are many tasks, operating system decides which task should get the CPU.
- **Printing controlling:** Operating system also controls printing function. If a user issues two print commands at a time, it does not mix data of these files but prints them separately.

Application Software

A set of programs to satisfy the user needs are called Application Software.

- Functions of application software
 - Managing information
 - Manipulating data
 - Constructing visuals
 - Coordinating resources
 - Calculating figures

Types of Application Software

Word Processor, Spread sheet, Presentation software, Database Management System (DBMS), Image editing software are different types of Application software.

Word Processor: A **word processor** is an application software that performs the task of composing, editing, formatting, and printing of documents.

Examples for word processor are Microsoft Office Word, Word perfect and OpenOffice.Org Writer.

Spread sheet: It is an application software for organization, analysis and storage of data in tabular form. Examples for Spread sheet software are Microsoft Excel, Lotus123.

Presentation software: A presentation program is a software package used to display information in the form of a slide show. Examples are Microsoft Powerpoint, Softmaker presentation etc.,

DBMS: It allows the definition, creation, querying, update, and administration of databases. Examples are Microsoft access, SQL (Structured Query Language).

Image editing software: It is used to edit the digital photo. Examples are Adobe photoshop, GIMP.

1.6 Computer Memory

Computer memory is used to store data and programs.

Types of Computer memory

There are two types of memory

1. Primary memory
2. Secondary memory

❖ Primary memory

Primary memory is also known as main memory.

There are two types of primary memory

1. RAM (Random Access Memory)
2. ROM (Read Only Memory)

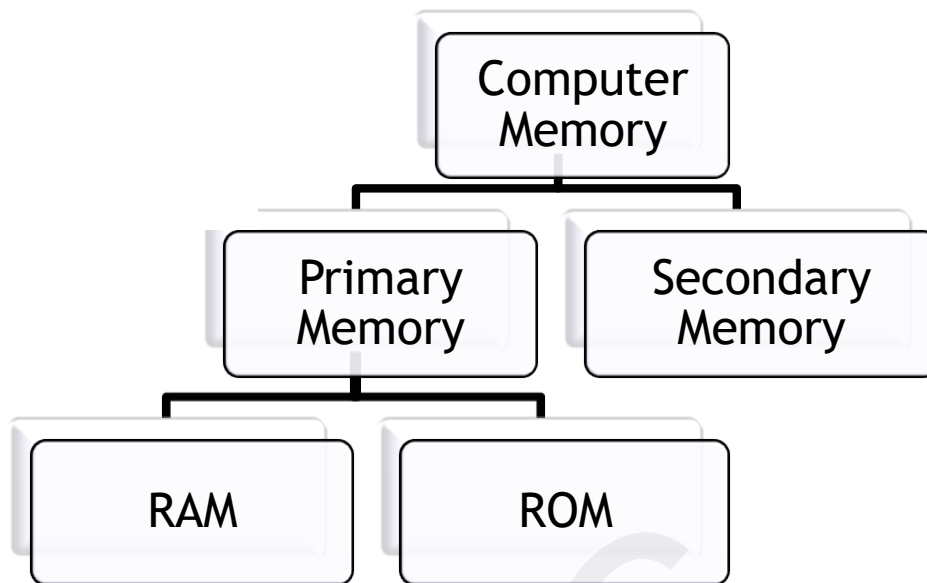


Figure 1.4: Types of Computer Memory

Random Access Memory: It is a temporary memory. The data stored on RAM will be erased when the power goes switched off. So it is also called as Volatile memory.

- **Types of RAM**

- SRAM - Static Random Access Memory.
- DRAM - Dynamic RAM.
- SDRAM- Synchronous Dynamic RAM
- DDR- Double Data Rate SDRAM

Read Only Memory: The memory from which we can only read but cannot write on it. The information is stored permanently in such memories during manufacture. It cannot be deleted by the user. So it is also called as non-volatile.

A ROM stores such instructions that are required to start a computer. This operation is referred to as **bootstrap**.

Types of ROM

- PROM (Programmable Read Only Memory)
- EPROM (Erasable and Programmable Read Only Memory)
- EEPROM (Electrically Erasable and Programmable Read Only Memory)

❖ Secondary memory

It is mainly used for storing information on permanent basis. It is slower than primary memory. Example: Hard disk.

1.7 Different types of Printer

Printers are divided into two categories

1. Impact printers
2. Non-Impact Printers

Impact printers

An impact printer makes contact with the paper. It usually forms the print image by pressing an inked ribbon against the paper using a hammer or pins.

Examples of impact printers are Dot-Matrix Printer, Daisy wheel Printer, Line Printer, Drum Printer.

- **The Dot-Matrix Printers**
 - matrix printer uses print heads containing from 9 to 24 pins.
 - These pins produce patterns of dots on the paper to form the individual characters.
 - The 24 pin dot-matrix printer produces better quality print.
 - Printing speed is 100-600 characters per second.

Advantage

- Inexpensive.
- **Daisy-wheel printers**
 - In Daisy wheel printer the print mechanism looks like a daisy; at the end of each “Petal” is a fully formed character which produces solid-line print.
 - A hammer strikes a “petal” containing a character against the ribbon, and the character prints on the paper.
 - Printing speed is slow typically 25-55 characters per second.

Non-impact printers

- Non-impact printers do not use a striking device to produce characters on the paper; and because these printers do not hammer against the paper.

Examples of non-impacted printers are Ink-jet printer, Laser Printer.

- **Ink-jet printers**

- Ink-jet printers form characters on paper by spraying ink from tiny nozzles through an electrical field that arranges the charged ink particles into characters.
- The ink is absorbed into the paper and dries instantly.
- Various colors of ink can also be used.
- Printing speed is approximately 250 characters per second.

Advantages of Ink-jet printer

- These printers produce less noise
- Print in better quality
- Greater speed.

Disadvantages of Ink-jet printer

- The maintenance cost is high.

- **Laser printers**

- Laser printers produce images on paper by directing a laser beam at a mirror which bounces the beam onto a drum.
- The drum has a special coating on it to which toner (an ink powder) sticks.
- Using patterns of small dots, a laser beam conveys information from the computer to a positively charged drum to become neutralized.
- From all those areas of drum which become neutralized, the toner detaches. As the paper rolls by the drum, the toner is transferred to the paper printing the letters or other graphics on the paper. A hot roller bonds the toner to the paper.

Advantages of Laser Printer

- The main advantage of Laser printer is its speed & efficiency at which it prints high-quality quality graphics & text.
- Laser printers does not produce disturbing sounds.

Disadvantages of Laser Printer

- Cost is relatively high when compared to other printers.

EXERCISES

I. Fill in the blanks:

- 1) Speaker is an _____ device.
- 2) Primary memory is also known as 'Main Memory' and Secondary memory is also known as _____ memory.
- 3) Keyboard converts the keystrokes into _____ that a computer can understand.
- 4) CPU stands for _____.
- 5) _____ works as both input device as well as output device.
(Touch screen / Mouse).

II. State True or False

- 1) Computer can understand only the language of 1's and 0's.
- 2) Generally capacity of Primary memory is bigger than the capacity of Secondary memory.
- 3) Optical devices work based on the principals of light.
- 4) When there is no power supply all the contents of ROM will be erased.
- 5) AND, OR , NOT are arithmetic operations.

III. Memory conversions

- 1) 4 KB = _____ bits.
- 2) 200 MB = _____ KB.
- 3) 1B= _____ b.
- 4) 2 TB = _____ GB.
- 5) _____ MB = 5 GB.

IV. Short answer type questions

- 1) Name any four input and four output device.
- 2) Draw a neat diagram of different components of computer and show how they are connected to each other.
- 3) Define Software. What are the different types of software?
- 4) What is a device driver?
- 5) What is the difference between software and hardware?
- 6) What is the difference between Primary memory and Secondary memory?
- 7) What is the difference between System software and Application software?

ACTIVITIES

1. Showing an Input device and an Output device.
2. Showing RAM and ROM.

UNIT II

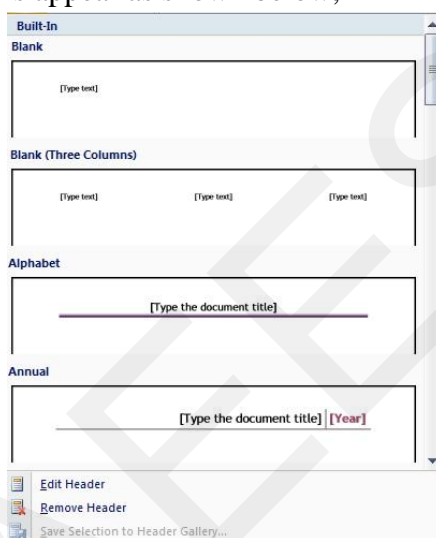
WORD PROCESSING (MS WORD)

2.1 Header and Footer

The content in the Header will appear at the top of each page of the document. The content in the Footer will appear at the bottom of each page of the document.

Steps to include Header

- Click on Insert menu.
- Click on Header option in the Header & Footer group.
- The build-In options appear as shown below,



- Select the desired option
- Type text tag will appear on the window. Type the content to appear in the header.
- Click on Close header and footer option in the close group.
- The typed text will appear on the top of each page of the document.

Steps to include Footer

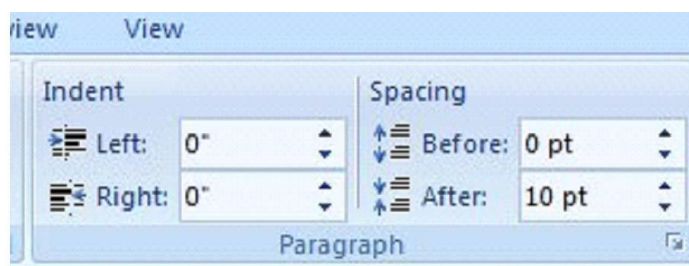
- Click on Insert menu.
- Click on Footer option in the Header & Footer group.
- The build-in options appear.
- Select the desired option.
- Type text tag will appear on the window. Type the content to appear in the footer.
- Click on Close header and footer option in the close group.
- The typed text will appear on the bottom of each page of the document.

2.2 Formatting of Paragraph

Steps to Format paragraph

Formatting a paragraph allows you to change line spacing, indent lines and paragraph.

The tools in the Paragraph group of Page Layout menu are used to format the Paragraph.



Changing Paragraph Alignment

Paragraph alignment allows the text to be aligned center, left, right, or justify (which means aligning it between both the right and left margins).

Steps to Change Paragraph Alignment

- Select the paragraph to be aligned.
- Click on Home menu.
- Tools for alignment appears as shown below,



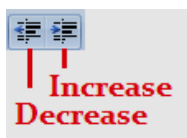
- Click on the required alignment tool.

Indenting Paragraphs

Indenting paragraphs allows to set different margins for different lines of text.

Steps to indent paragraph

- Keep the cursor before the line for which indent has to be increased or decreased.
- Click on the Home menu
- Select the indent buttons in the 'Paragraph' group.



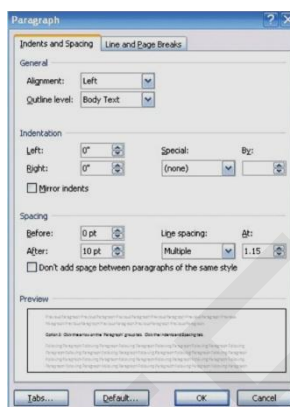
- A click on the respective tool will allow the text to indent left or right. The indentation increases each time you click on the button.

Alternative method

Keep the cursor before the line for which indent has to be increased or decreased.

Right click and choose paragraph option.

Paragraph dialog box appears as shown below,



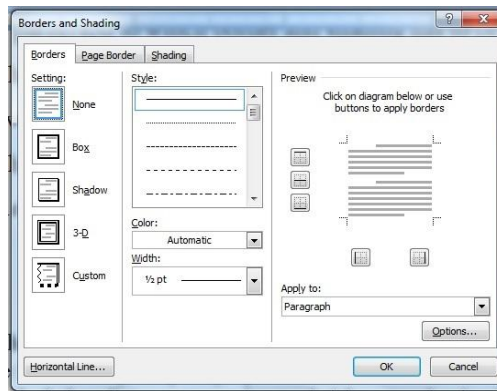
- Click the Indents and Spacing tab.
- Set the indentions.
- Click on Ok button.

Add Borders or Shading to a Paragraph

Borders and shadings can be added to a paragraph, many paragraphs or to an entire page.

Steps to add borders and shadings to a Paragraph

- Select the paragraph to which border and shading has to be applied.
- Click on the border button in the paragraph group.
- A dropdown menu of borders option will appear.
- Click on the Borders and shadings option
- The Borders and Shading dialog box appears as shown below,



- Choose the border pattern and click on OK.
- Click on the Shading tab.
- The following window appears,



- Choose the desired color for shading.
- Click on OK button.

Apply Paragraph Styles

- Style refers to the format of the paragraph.
- MS Word offers several built-in styles.
- These include headings, no spacing, subtitles, emphasized text, list paragraph, etc.

Steps to apply style to a paragraph

- Click on 'Home' tab
- Many styles appear as shown below in the Styles group.



- Scroll through these styles to find the suitable one.
- Click on the selected style.

2.3 Mail Merge

It is an advanced feature of MS Word, which allows to generate any number of letters in which some content of the letter being different and major content remains the same.

For example, to send a birthday invitation to many people, the content remains the same, only the recipient address will be different in each letter.

So any number of invitations can be prepared from a main document and the data source. This can be achieved with the help of mail merge.

Steps for Mailmerge

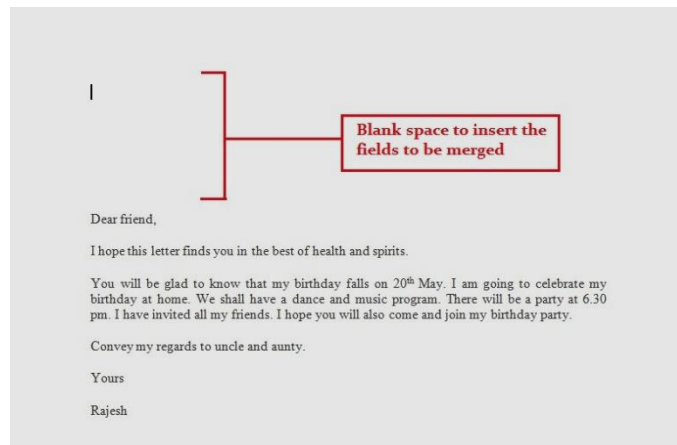
There are 3 major steps,

1. Creating the Main document
2. Creating the Data source
3. Merging the field

1. Creating a Main document

Steps to Create the Main document prepare

- Open a new document in MS Word.
- Type the complete body of the letter. Leave sufficient space where the recipient address has to be included.
- Format the letter.
- Save the file.



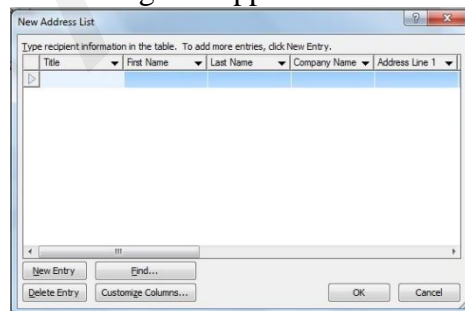
Screen shot of a main document

- Click on *Start Mail Merge* command in the *Start Mail merge* group in the Mailings tab.
- Click on letters in the appearing drop down menu.

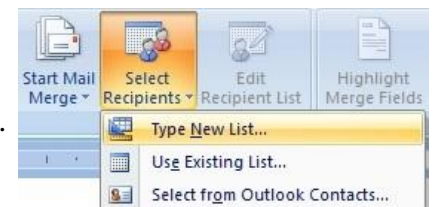
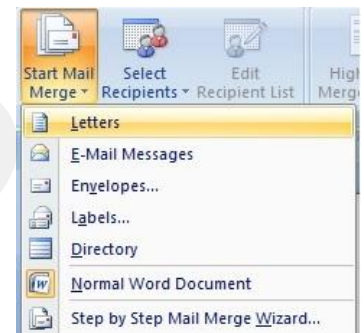
2. Creating the Data source

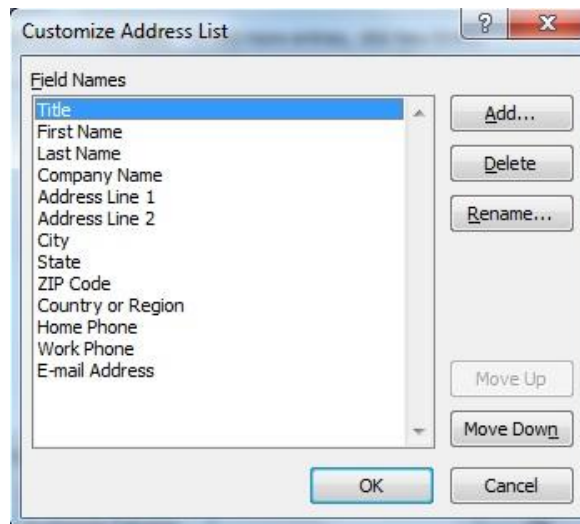
Steps to Create the Data Source

- Click on *Mailings* tab
- Click on *Select Recipients* option in the *Start Mail Merge* group.
- Click on *Type New List...* option from the drop down menu.
- The *New Address List* dialog box appears as shown below,

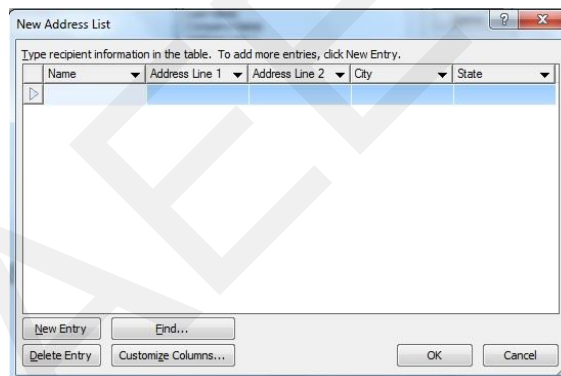


- Click on *Customise Columns* button to select the field names to be included in the Data source.
- The following *Customise Address List* dialog box will appear as shown below,

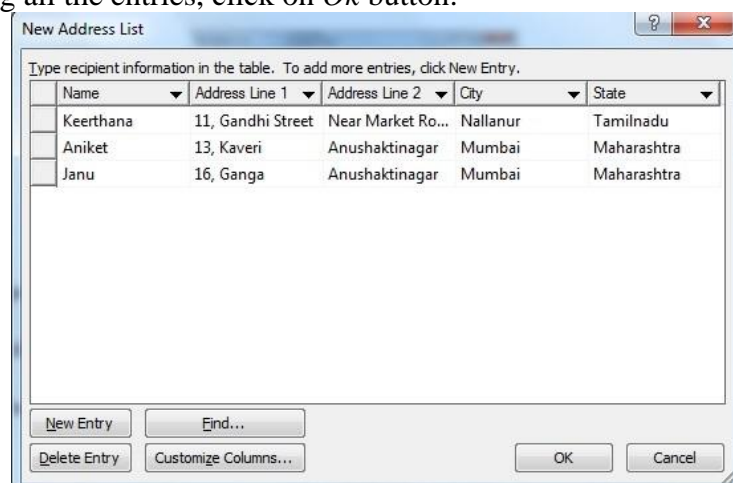




- By default some fields are shown in the dialog box, Select the unwanted field name and click on *delete* button.
- Click on Add button to add new fields
- After adding all the required fields, click on *Ok* button.
- The selected fields will appear as shown below,



- Type the entries in the first row.
- Click on *New Entry* button to add a new entry.
- After adding all the entries, click on *Ok* button.



- A Save Address List dialog box will appear as shown below,

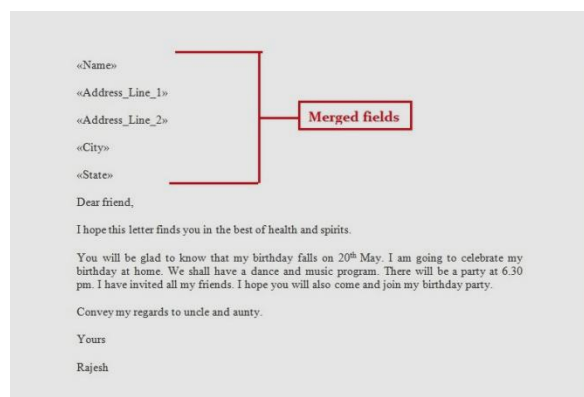
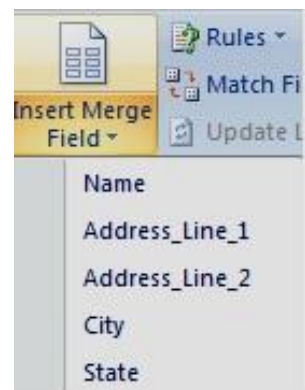


- Type the file name and Click on **Save** button.
- The data source will be saved automatically with *.mdb* extension.

3. Merging the field

Steps to Merge the fields

- Open the main document and keep the cursor where the field has to be inserted.
- Click on *Insert Merge Field* command in the *Write & Insert Fields* group.
- The field names available in the data source will appear in the drop down list. Click the field to be merged with the main document. The field will be inserted in the main document.
- To add more fields again repeat the previous step.
- The main document will appear as shown below,

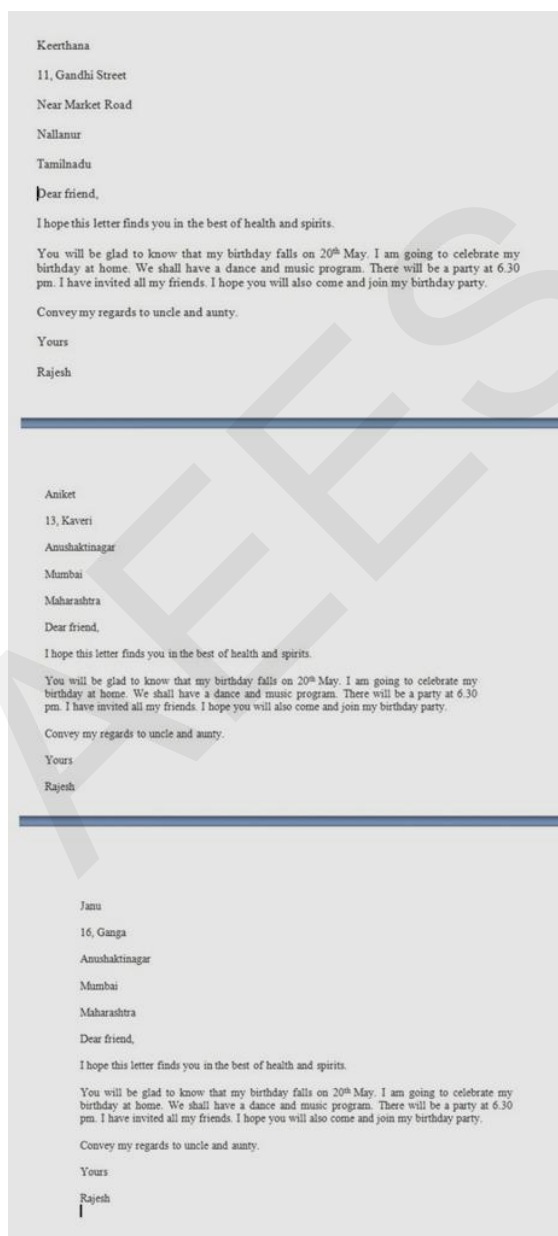


- Click on *Finish & Merge* option in the *Finish* group.
- Click on *Edit individual document to merge to a new document*.



- Click on Ok button.

The document will be merged and a new document will be created as shown below,



By default the created document is named as Letters1.

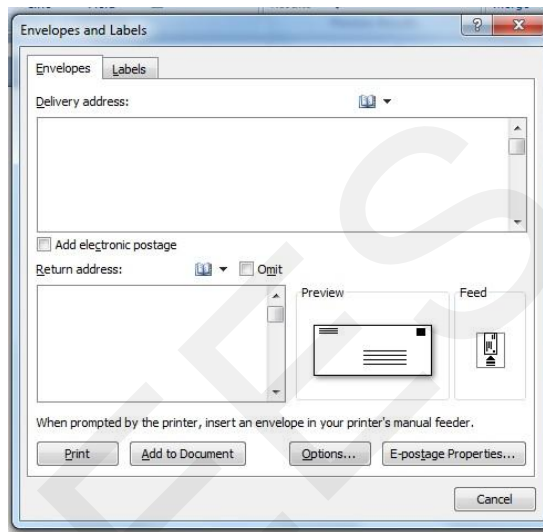
Save the document with the desired name.

Note : Our sample data source contains only 3 records, so 3 letters are prepared in a new document by the mail merge process. If ‘n’ number of records are entered, then it will prepare ‘n’ such letters in a new document.

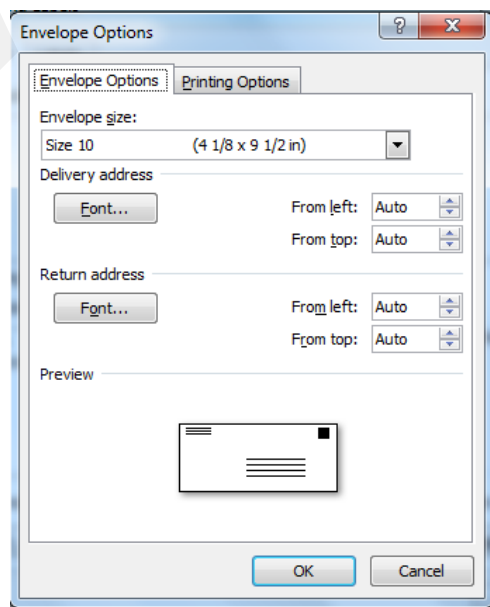
2.4 Envelope and labels

Steps to create an envelope

- Click on Mailings tab
- Click on the *envelopes* in the *create* group.
- Envelopes and labels dialog box will appears as shown below



- In the Delivery Address, type the recipient address.
- In the Return address, type the address of the sender.
- Click on *Options* button, an envelope options window opens as shown below



- Select the envelope size by clicking on the drop down list.
- Delivery address and Return address font size can be edited by clicking on the font button.
- Click on OK button.
- Address of sender and Receiver will be seen on the envelope.
- Preview before printing the envelope.

Create labels

- Click on Mailings tab
- Click on *labels* in the create group.
- In the address textbox, delivery address will appear by default. In case you want to create labels for return address, click on use return address check box.
- Click on options button and select the number of labels to be printed per page from the product number drop down list.
- Click on print button to print the labels
- Click on New Document button to get the labels in a new document. A sample label created with 30 labels in a page is displayed here.

Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai
Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai
Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai	Jhanvi Gandhi street Market Road Chennai

2.5 Page column

- Select the text for which the column format has to be changed. if you do not select any text, Word will format the entire document.
- Click on the Page Layout tab
- Click on the Columns... in the Page Setup group
- Choose the format from the drop down list .

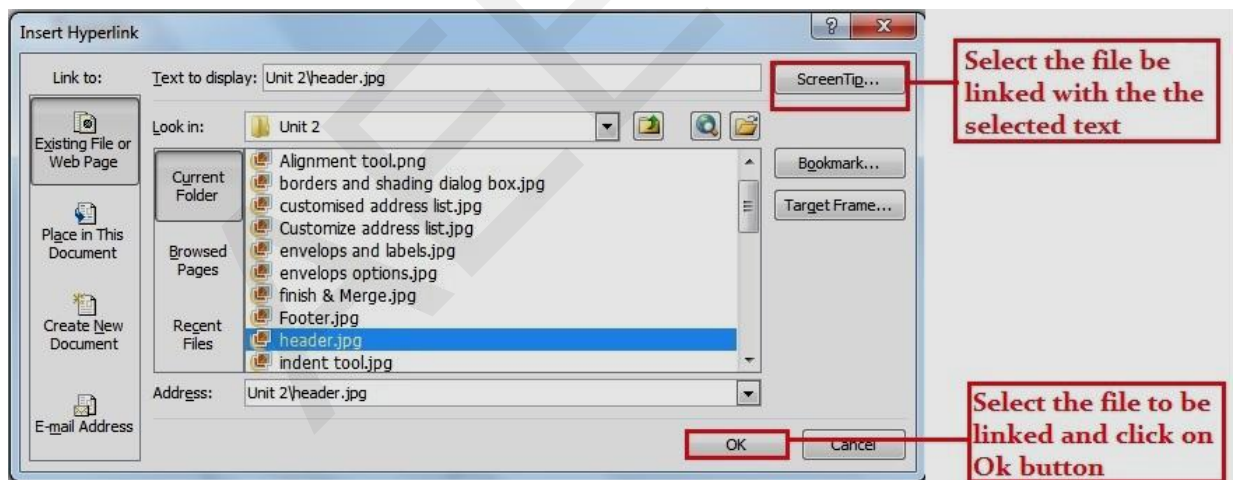
- You can select a preset, automatically formatted number of columns with equal spacing by clicking One, Two, Three, or Four.
- By clicking *More columns....* option, number, width, and spacing of the columns can be customised.
- Click on OK.

2.6 Hyperlink

A hyperlink is a reference to data that the reader can directly follow either by clicking or tapping.

Steps to include Hyperlink

- Select the text for which Hyperlink needs to be included.
- Click on Insert Tab
- Click on *Hyperlink* in the *Links* group
- *Insert Hyperlink dialog* box appears as shown below,




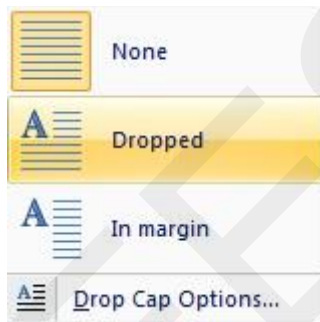
- Select the file to be linked and click on Ok button.
- Click on ScreenTip button, to display some text as a tip for the user. This will be displayed when the cursor moves on the text which contains the Hyperlink.

2.7 Drop Cap

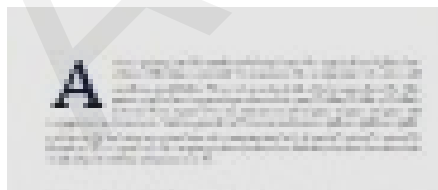
A *drop cap* (dropped capital) is a large capital letter at the beginning of a paragraph. The size of a drop cap is usually two or more lines. Mostly used in formatting the document for newspaper.

Steps to Insert Drop Cap

- Select the first character of a paragraph.
- Click on the Insert Tab
- Click on *Drop Cap*  in the *Text* group
- A drop down list will appear as shown below,



- Select the drop cap option from the above list
- The first letter of the selected paragraph will be displayed as a large capital letter as shown below,



EXERCISES

I. Short answer type questions.

- 1) Define Header and Footer option in MS-Word.
- 2) Define Mail Merge.
- 3) What are the three main steps for performing Mail Merge?
- 4) What is hyperlink?
- 5) What is the purpose of Drop Cap?

PRACTICAL EXERCISES

1) The school is going to present a certificate to the students for the achievements in Co-Curricular Activities. Create a Certificate using MS Word. In the Data Source enter the Student details such as Name, Class/Sec., Events in which the student got prize, position, etc., Using mail merge create certificates for all the students.

2) i. Create a word document on the topic “Water scarcity and Importance of drinking water”. (Note: Make two paragraphs, one for Water Scarcity and the other for Importance of Water)

ii. In the Header add the text “Each drop counts” and in the footer add the text “Save Water”.

iii. Using page column make two columns. Let the contents of “Water Scarcity” to be displayed in the first column and the contents of “Importance of drinking water” to be displayed in the second column.

iv. Use drop cap at the beginning of each paragraph.

UNIT- III

SPREAD SHEET (MS EXCEL)

3.1 Table creation in MS Excel and implementing Various Charts

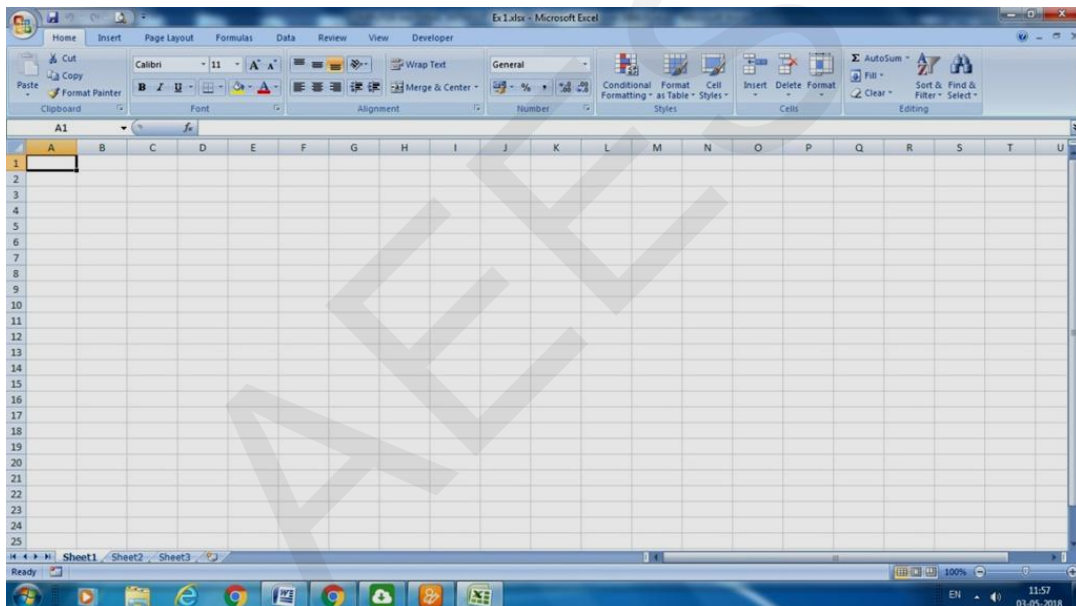
A worksheet is a collection of cells, where data is entered and can be manipulated.

Creating a Table in MS Excel

Table is a collection of related data arranged in rows and columns.

Open Microsoft Office Excel.

A workbook opens with 3 work sheets by default.

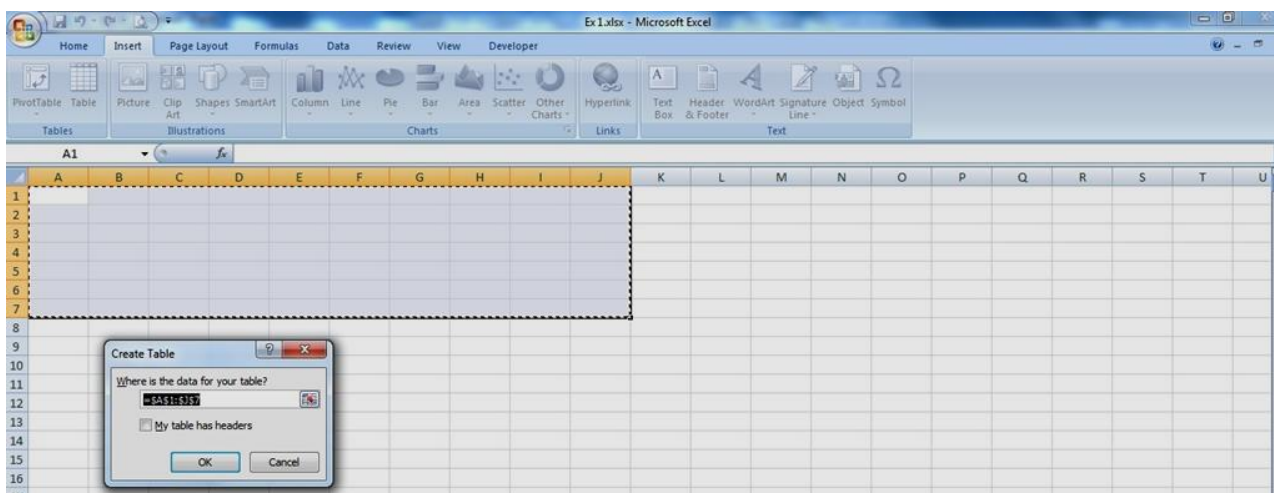


Select the cells you want to include in the table.

Click on **Insert** Tab

Click on **Table** from **Tables** group

A **Create Table** dialog box appears as shown below



Click on **Ok** button.

Different Table styles are available in the **Design** Tab.

Select the required Table Style.

By default the field names will be shown as Column1, Column 2, etc., rename the Columns name as required for the table.



Enter the data in the table, the sample table created is shown below,

	A	B	C	D	E	F	G
1	ROLL NO.	NAME OF THE STUDENT	ENGLISH	HINDI	MATHS	SCIENCE	SST
2	1	Siddharth Rathod	40	40	29	40	38
3	2	Purvi S. Iyer	38	39	40	34	35
4	3	Ayush Meena	39	29	39	35	40
5	4	Swara Wadekar	29	40	38	29	40
6	5	Yohan Mathar	40	39	29	40	38
7	6	Smit Sachin Ware	39	38	30	39	39
8	7	Shravani	38	35	36	38	40

Table 3.1: Student mark list table created in MS excel

Charts

- Select the **cells** you want to chart, including the **column titles** and **row labels**. These cells will be the **source data** for the chart. In the given example, Cells B2:G8 is selected.
- Click on **Insert** Tab will appear as shown below,



- In the **Chart** group different types of chart will be displayed.
- Click on desired chart type from the **Charts** group. For example, Column Chart has been chosen here.
- The chart appears as shown below,

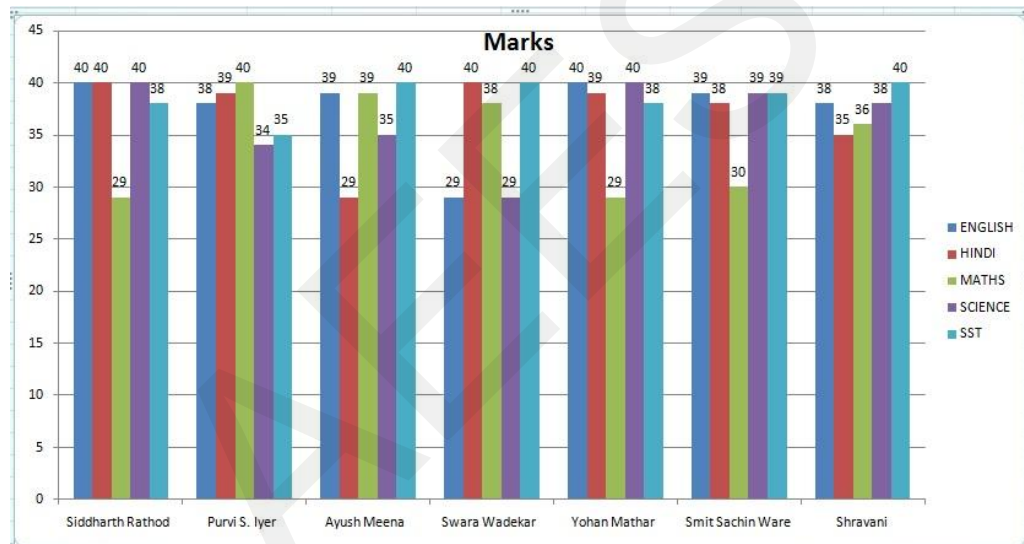


Figure 3.1 A chart created for the table shown in 3.1

Parts of the Chart

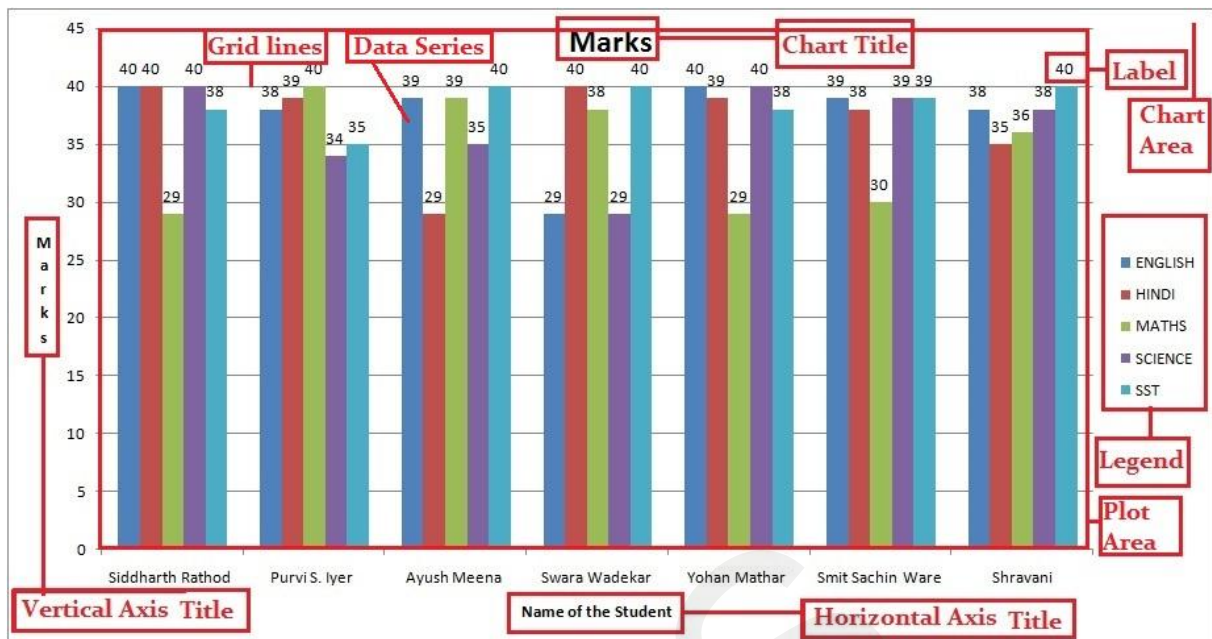


Figure 3.2: Components of a Chart in Excel

- **Chart Title:** A chart title identifies the graph to the operator and is displayed at the top of the graph.
- **Chart area:** Everything inside the chart window, including all parts of the chart (labels, axes, data markers, tick marks, and other elements listed here).
- **Data series:** A group of related values, such as all the values in a single row in the chart. A chart can have just one data series (shown in a single bar or line), but it usually has several.
- **Axis:** A line that serves as a major reference for plotting data in a chart. In two-dimensional charts there are two axis
 - x -axis (horizontal)
 - y -axis (vertical).
- **Plot area:** The area where Excel plots the data, including the axis and all markers that represent data points.

- **Grid lines:** Optional lines extending from the tick marks across the plot area, thus making it easier to view the data values represented by the tick marks.
- **Legend:** A key that identifies patterns, colors or symbols associated with the markers of a chart data series. The legend shows the data series name corresponding to each data marker (such as the name of the blue columns in a column chart).
- **Chart label:** A data label provides information about individual data markers, such as the value being graphed either as a number or as a percent.

Types of Chart

Excel provides you different types of charts. Based on the type of data, you can create a chart. You can also change the chart type later.

Excel offers the following major chart types –

- Column Chart
- Line Chart
- Pie Chart
- Doughnut Chart
- Bar Chart
- Area Chart
- XY (Scatter) Chart
- Bubble Chart
- Surface Chart
- Radar Chart

Each of these chart types have sub-types.

Column Chart

A Column Chart typically displays the categories along the horizontal (category) axis and values along the vertical (value) axis.

Line Chart

Line charts can show continuous data over time on an evenly scaled Axis. Therefore, they are ideal for showing trends in data at equal intervals, such as months, quarters or years.

In a Line chart –

- Category data is distributed evenly along the horizontal axis.
- Value data is distributed evenly along the vertical axis.

Pie Chart

Pie charts show the size of items in one data series, proportional to the sum of the items. The data points in a pie chart are shown as a percentage of the whole pie.

Doughnut Chart

A Doughnut chart shows the relationship of parts to a whole. It is similar to a Pie Chart with the only difference that a Doughnut Chart can contain more than one data series, whereas, a Pie Chart can contain only one data series.

A Doughnut Chart contains rings and each ring representing one data series.

Bar Chart

Bar Charts illustrate comparisons among individual items. In a Bar Chart, the categories are organized along the vertical axis and the values are organized along the horizontal axis.

Area Chart

Area Charts can be used to plot the change over time and draw attention to the total value across a trend. By showing the sum of the plotted values, an area chart also shows the relationship of parts to a whole.

XY (Scatter) Chart

XY (Scatter) charts are typically used for showing and comparing numeric values, like scientific, statistical, and engineering data.

A Scatter chart has two Value Axes –

- Horizontal (x) Value Axis
- Vertical (y) Value Axis

It combines x and y values into single data points and displays them in irregular intervals, or clusters. To create a Scatter chart, arrange the data in columns and rows on the worksheet.

Place the x values in one row or column, and then enter the corresponding y values in the adjacent rows or columns.

Bubble Chart

A Bubble chart is like a Scatter chart with an additional third column to specify the size of the bubbles it shows to represent the data points in the data series.

A Bubble chart has the following sub-types –

- Bubble
- Bubble with 3-D effect

Surface Chart

A Surface chart is useful when you want to find the optimum combinations between two sets of data. As in a topographic map, colors and patterns indicate areas that are in the same range of values.

To create a Surface chart –

- Ensure that both the categories and the data series are numeric values.
- Arrange the data in columns or rows on the worksheet.

Radar Chart

Radar charts compare the aggregate values of several data series.

3.2 Cell reference in MS Excel

A cell reference refers to a cell or a range of cells on a worksheet and can be used in a formula so that Microsoft Office Excel can find the data that the formula has to calculate.

Types of Cell reference

There are three types:

- Relative reference
- Absolute reference
- Mixed reference

The type of cell reference is important when writing a formula, since each behaves differently when copied or moved to another cell.

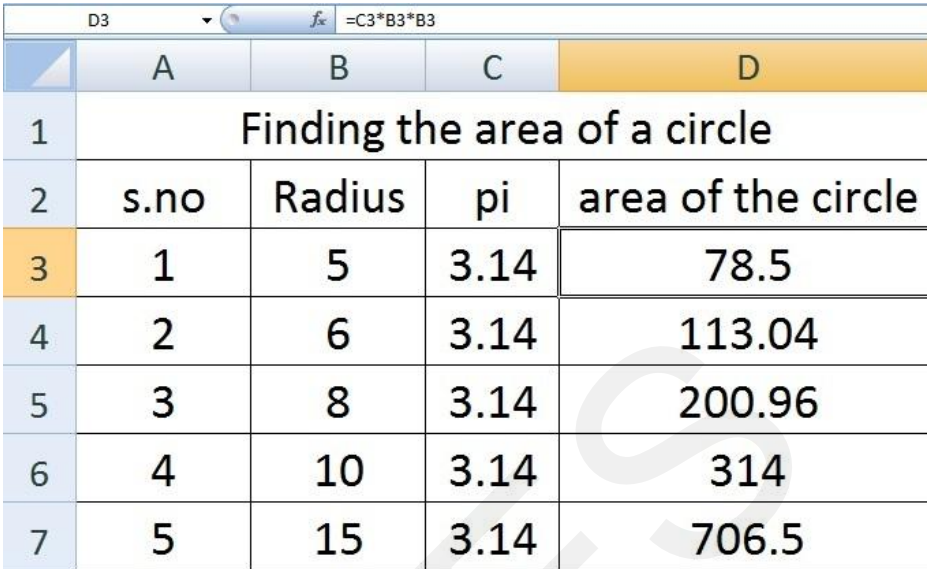
Understanding Cell References

Cell reference means the cell to which another cell refers. For instance, if in B2 you have =B3, cell B2 is referring to cell B3. The cell reference in this example is B3

In the formula, =sum(B2:B10), the cell reference is B2:B10. The formula is telling Excel to add all of the numbers starting in cell B2 through cell B10. Sometimes the cell reference may be referred to as the cell range because most references in a formula refer to multiple cells within a range.

Relative reference

By default, Excel uses relative reference. Relative cell references, when copied to another cell or across multiple cells, will change based on where you copy them. For example, Look at the excel sheet given below for calculating the area of a circle when radius is given.



	A	B	C	D
1	Finding the area of a circle			
2	s.no	Radius	pi	area of the circle
3	1	5	3.14	78.5
4	2	6	3.14	113.04
5	3	8	3.14	200.96
6	4	10	3.14	314
7	5	15	3.14	706.5

The formula for finding the area of a circle is πr^2

So in the cell D3, the formula is given as $=C3*B3*B3$.

In cells D4, D5, D6 and D7, formulas need not be typed again. Click on the cell D3, now D3 is the active cell. Keep the cursor in the right bottom corner of the active cell a + symbol appears, hold and press the plus sign to copy the formula down. Automatically, the formulas in cells D4, D5, D6 and D7 will become $=C4*B4*B4$, $=C5*B5*B5$, $=C6*B6*B6$, and $=C7*B7*B7$.

Absolute reference

To make the cell reference to absolute cell reference, \$ symbol has to be placed before the column alphabet and row number.

Unlike relative references, absolute references do not change when copied and pasted in other cell. You can use an absolute reference to keep a row, column or both constant. For example,

In the calculation of area of the circle, π value remains constant. So instead of entering the value from cells C3 to C7, absolute reference can be used.

	A	B	C
1	Finding the area of a circle		
2	pi	3.14	
3	s.no	Radius	area of the circle
4	1	5	78.5
5	2	6	113.04
6	3	8	200.96
7	4	10	314
8	5	15	706.5

Absolute reference

Mixed reference

A combination of relative and absolute reference is called mixed reference. In some applications we may need to keep the row as constant and column as changing. Then place a \$ symbol in front of the row number (B\$6) in the formula.

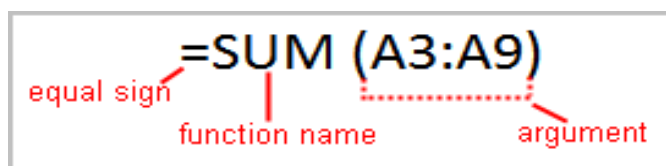
3.3 Functions in MS Excel

A **function** is a **predefined formula** that performs calculations using specific values in a particular order. Functions save the users time because they need not write the formula. For example, an Excel function called **SUM** can be used to quickly find the addition value of the values in a range of numbers.

The parts of a function,

1. All functions begin with the **equal sign (=)**.
2. After the = sign, define the **function name** (e.g., Sum).
3. An **argument** is the cell range or cell references that are enclosed by parentheses.

An example of a function to add a range of cells, A3 through A9 is given below,



Commonly used functions in Excel

❖ Statistical functions

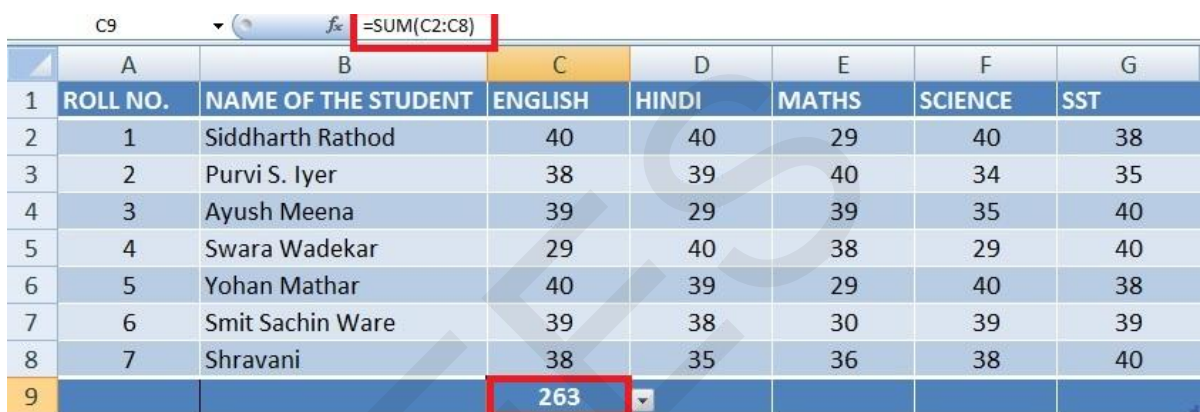
- **SUM:** Adds the values entered in the range of cells mentioned in the argument.

The syntax of the function is:

=SUM(number1, number2, ...)

where the **number** arguments are a set of numbers that you want to find the sum of.

Example : In table 3.1, enter **=SUM(C2:C8)** in the cell C9, the addition value of the numbers from cell C2 to C8 will be displayed. This shows the total marks obtained in English by all the students.



	A	B	C	D	E	F	G
1	ROLL NO.	NAME OF THE STUDENT	ENGLISH	HINDI	MATHS	SCIENCE	SST
2	1	Siddharth Rathod	40	40	29	40	38
3	2	Purvi S. Iyer	38	39	40	34	35
4	3	Ayush Meena	39	29	39	35	40
5	4	Swara Wadekar	29	40	38	29	40
6	5	Yohan Mathar	40	39	29	40	38
7	6	Smit Sachin Ware	39	38	30	39	39
8	7	Shravani	38	35	36	38	40
9			263				

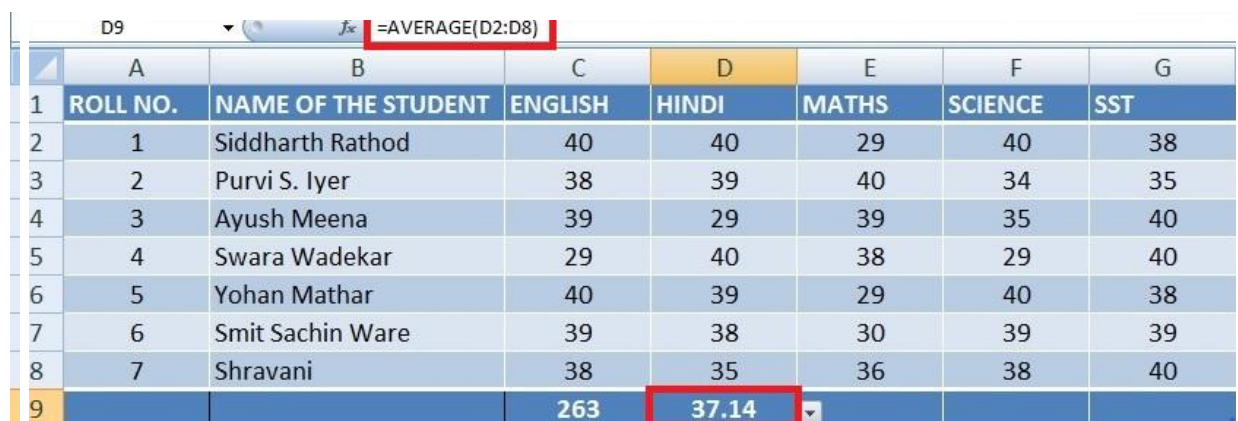
Figure 3.3: Screen shot of SUM function

- **AVERAGE:** Calculates the average of a range of cells mentioned in the argument.

The syntax of the function is:

=AVERAGE(number1, number2, ...)

Example : In table 3.1, enter **=AVERAGE(D2:D8)** in the cell D9, the average value of the numbers from cell D2 to D8 will be displayed. This shows the average marks obtained in Hindi.



	A	B	C	D	E	F	G
1	ROLL NO.	NAME OF THE STUDENT	ENGLISH	HINDI	MATHS	SCIENCE	SST
2	1	Siddharth Rathod	40	40	29	40	38
3	2	Purvi S. Iyer	38	39	40	34	35
4	3	Ayush Meena	39	29	39	35	40
5	4	Swara Wadekar	29	40	38	29	40
6	5	Yohan Mathar	40	39	29	40	38
7	6	Smit Sachin Ware	39	38	30	39	39
8	7	Shravani	38	35	36	38	40
9			263	37.14			

Figure 3.4: Screen shot of AVERAGE function

- **COUNT:** The **COUNT** function counts the number of cells that contain numbers, and counts numbers within the list of arguments.

The syntax of the function is:

=COUNT(number1, number2, ...)

Example : In table 3.1, enter **=COUNT(E2:E8)** in the cell E9, the numbers of entries made from cell E2 to E8 will be counted and displayed. This can be used to find the number of students attended the maths exam. (Assuming that no mark entries will be made for absentees).

	A	B	C	D	E	F	G
1	ROLL NO.	NAME OF THE STUDENT	ENGLISH	HINDI	MATHS	SCIENCE	SST
2	1	Siddharth Rathod	40	40	29	40	38
3	2	Purvi S. Iyer	38	39	40	34	35
4	3	Ayush Meena	39	29	39	35	40
5	4	Swara Wadekar	29	40	38	29	40
6	5	Yohan Mathar	40	39	29	40	38
7	6	Smit Sachin Ware	39	38	30	39	39
8	7	Shravani	38	35	36	38	40
9			263	37.14	7		

Figure 3.5: Screen shot of **COUNT** function

- **MAX:** Identifies the largest number in a range of cells mentioned in the argument.

The syntax of the function is:

=MAX(number1, number2, ...)

Example : In table 3.1, enter **=MAX(F2:F8)** in the cell F9, the maximum value from cell F2 to F8 will be displayed. This will display the the maximum marks obtained in Science.

	A	B	C	D	E	F	G
1	ROLL NO.	NAME OF THE STUDENT	ENGLISH	HINDI	MATHS	SCIENCE	SST
2	1	Siddharth Rathod	40	40	29	40	38
3	2	Purvi S. Iyer	38	39	40	34	35
4	3	Ayush Meena	39	29	39	35	40
5	4	Swara Wadekar	29	40	38	29	40
6	5	Yohan Mathar	40	39	29	40	38
7	6	Smit Sachin Ware	39	38	30	39	39
8	7	Shravani	38	35	36	38	40
9			263	37.14	7	40	

Figure 3.6: Screen shot of **MAX** function

- **MIN**: Identifies the smallest number in a range of cells mentioned in the argument.

The syntax of the function is:

=MIN(**number1**, **number2**, ...)

Example : In table 3.1, enter =MIN(G2:G8) in the cell G9, the minimum marks obtained from cell G2 to G8 will be displayed. This will display the the minimum marks obtained in Social Science.

	A	B	C	D	E	F	G
1	ROLL NO.	NAME OF THE STUDENT	ENGLISH	HINDI	MATHS	SCIENCE	SST
2	1	Siddharth Rathod	40	40	29	40	38
3	2	Purvi S. Iyer	38	39	40	34	35
4	3	Ayush Meena	39	29	39	35	40
5	4	Swara Wadekar	29	40	38	29	40
6	5	Yohan Mathar	40	39	29	40	38
7	6	Smit Sachin Ware	39	38	30	39	39
8	7	Shravani	38	35	36	38	40
9			263	37.14	7	40	35

Figure 3.7: Screen shot of MIN function

❖ Text functions

- **CONCATENATE**: Joins several text strings into one text string.

The syntax of the function is:

=CONCATENATE(text1,text2,...)

Example: Enter the following in a cell,

=CONCATENATE("Good", " ", "Morning")

The output will be displayed as **Good Morning**

- **LENGTH**: Returns the number of characters in a text string.

The syntax of the function is:

=LEN(text)

Example: Enter the following in a cell,

=LEN("Hello")

The output will be displayed as **5**.

- **LOWER** : Converts all uppercase letters in a text string to lowercase.

The syntax of the function is:

=LOWER(text)

Example: Enter the following in a cell,

=LOWER("HELLO")

The output will be displayed as **hello**

- **UPPER:** Converts all lowercase letters in a text string to uppercase.

The syntax of the function is:

=UPPER(text)

Example: Enter the following in a cell,

=LOWER("hello")

The output will be displayed as **HELLO**

- **TRIM:** Removes all spaces from text except for single spaces between words.

The syntax of the function is:

=TRIM(text)

Example: Enter the following in a cell,

=TRIM("Good Morning")

The output will be displayed as **Good Morning**

❖ Date functions

- **NOW:** Returns the current date & time.

The syntax of the function is:

=NOW()

The output will be **04-05-2018 16:20**

- **TODAY:** Returns today's date.

The syntax of the function is:

=TODAY()

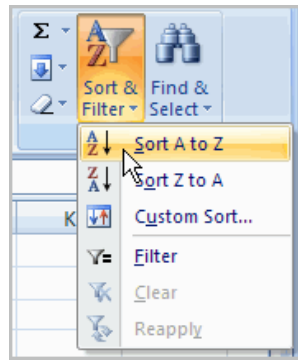
The output will be **04-05-2018**

3.4 Sorting of data in MS Excel

Sorting allows to reorder the data in ascending or descending order.

Steps to sort in alphabetical order

- Select a cell in the column you want to sort .
- Click the **Sort & Filter** command in the **Editing** group on the **Home** tab.
- Select **Sort A to Z**. Now the information in the Category column is organized in alphabetical order.



Sort Z to A option allows to sort the data in reverse alphabetical order.

Example: In the table 3.1, Sorting the data based on **Name of the students** field.

	A	B	C	D	E	F	G
1	ROLL NO.	NAME OF THE STUDENT	ENGLISH	HINDI	MATHS	SCIENCE	SST
2	3	Ayush Meena	39	29	39	35	40
3	2	Purvi S. Iyer	38	39	40	34	35
4	7	Shravani	38	35	36	38	40
5	1	Siddharth Rathod	40	40	29	40	38
6	6	Smit Sachin Ware	39	38	30	39	39
7	4	Swara Wadekar	29	40	38	29	40
8	5	Yohan Mathar	40	39	29	40	38
9			263	37.14	7	40	35

Sorted list

Step to sort from smallest to largest number

- Select a cell in the column you want to sort.
- Click the **Sort & Filter** command in the **Editing** group on the **Home** tab.
- Select **From Smallest to Largest**. The data will be organized from the smallest to largest.

You can sort in **reverse numerical order** by choosing **From Largest to Smallest** in the list.

Largest to Smallest option allows to sort data from largest to smallest number.

3.5. Filtering data in MS Excel

You can filter data using the AutoFilter feature in Excel 2007 to display only the data that meets specified criteria. Filtered data can be copied, manipulated, and printed without having to move it to a new spreadsheet.

Data can be filtered to get specific value based on a specific criteria.

Steps to Filter the data in excel

- Select the **Data** tab, then select **Sort & Filter** in Editing group.
- Click on **Filter** from the drop down menu.
- Drop-down arrows will appear in the header of each column.
- Click the **drop-down arrow** for the column you want to filter. In this example, we'll filter the English marks column to filter the students detail who scored 40.
- The **Filter** menu appears.
- **Uncheck** the boxes next to the data you don't want to view, or uncheck the box next to **Select All** to quickly uncheck all.
- **Check** the boxes next to the data that you want to filter. In this example, we'll check 40. (As shown in the Figure 3.8.)

	A	B	C	D	E	F	G
1	ROLL NO.	NAME OF THE STUDENT	ENGLISH	HINDI	MATHS	SCIENCE	SST
2	3	Ayush M	39	29	39	35	40
3	2	Purvi S. I	39	39	40	34	35
4	7	Shravani	35	35	36	38	40
5	1	Siddharth	40	40	29	40	38
6	6	Smit Sach	38	38	30	39	39
7	4	Swara W	40	40	38	29	40
8	5	Yohan M	39	39	29	40	38
9			37.14		7	40	35

Figure 3.8: Screen shot of Number filters

- Click **OK**. All other data will be filtered, or temporarily hidden. Only the data of the students, who scored 40 in English subject will be visible.

	A	B	C	D	E	F	G
1	ROLL NO.	NAME OF THE STUDENT	ENGLISH	HINDI	MATHS	SCIENCE	SST
5	1	Siddharth Rathod	40	40	29	40	38
8	5	Yohan Mathar	40	39	29	40	38

Figure 3.9: Screen shot of Filtered table

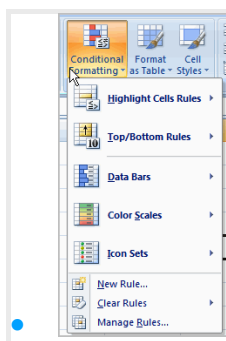
Note: To remove the filtering and view all the data again click on the **filter** in the **Editing** group.

3.6. Conditional Formatting MS Excel

Conditional formatting is used to format cells according to a particular condition.

Steps for Conditional formatting in Excel

- Select the range of cells to which you want to apply conditional formatting.
- Click the Conditional Formatting button in the Styles group on the Home tab.
- A menu appears as shown below, with several different options for specifying the criteria.



- Point to Highlight Cells Rules and then select the criteria you want to use. (Criteria options include Greater Than, Less Than, Between, Equal To, Text That Contains, A Date Occurring, and Duplicate Values).
- A dialog box opens, where you can specify the value.
- Enter the values you want to reference in the text box.
- Click the drop-down arrow next to the format options and select the desired formatting.
- Live Preview shows you what your data will look like. Click the Custom Format option if you want to create your own formatting selections.
- **Click OK. The cells that meet the specified criteria now appear with the chosen formatting options.**

Example : In the table 3.1, the cells with 40 marks are highlighted.

	A	B	C	D	E	F	G
1	ROLL NO.	NAME OF THE STUDENT	ENGLISH	HINDI	MATHS	SCIENCE	SST
2	3	Ayush Meena	39	29	39	35	40
3	2	Purvi S. Iyer	38	39	40	34	35
4	7	Shravani	38	35	36	38	40
5	1	Siddharth Rathod	40	40	29	40	38
6	6	Smit Sachin Ware	39	38	30	39	39
7	4	Swara Wadekar	29	40	38	29	40
8	5	Yohan Mathar	40	39	29	40	38

3.7 Workbook & Worksheet

Workbook

- The workbook is a collection of worksheets.
- When a new excel file is created, a new workbook opens.
- By default the workbook consists of three worksheets.
- More Worksheets can be added to the workbook.
- A worksheet can also be deleted from the workbook.
- A worksheet organizes various kinds of related information.

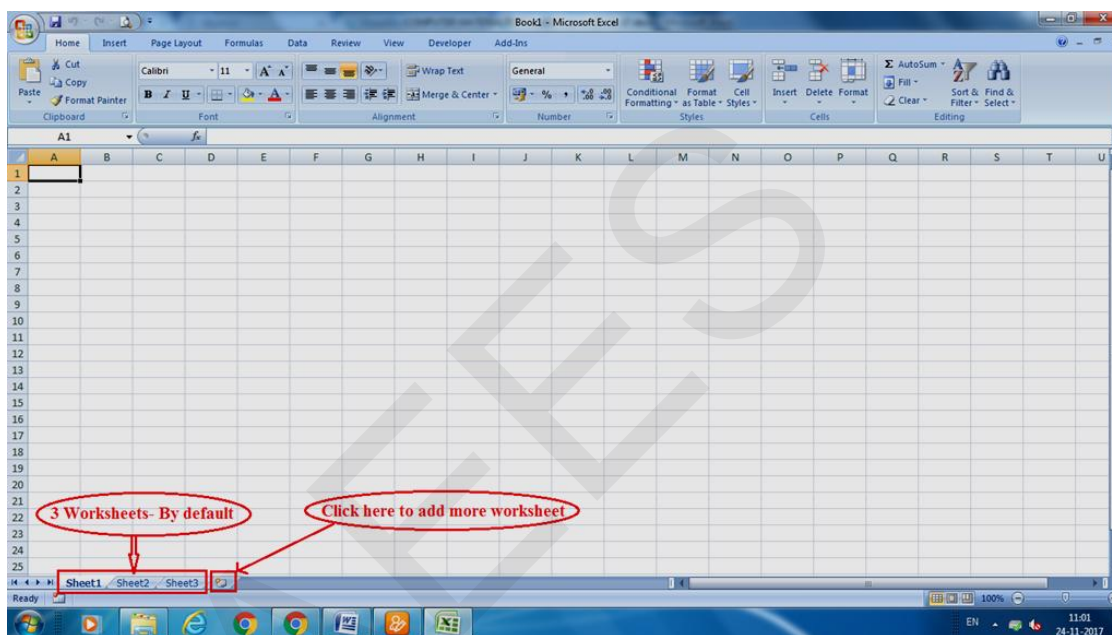


Figure 5.1: A workbook

Worksheet

- A worksheet is a collection of cells, where data is entered and can be manipulated.
- A cell is an intersection of a row and a column.
- Rows are named with Arabic numbers.
- Columns are named with Alphabets.
- A cell is named as a combination of intersecting column name and row name respectively. Example: A1

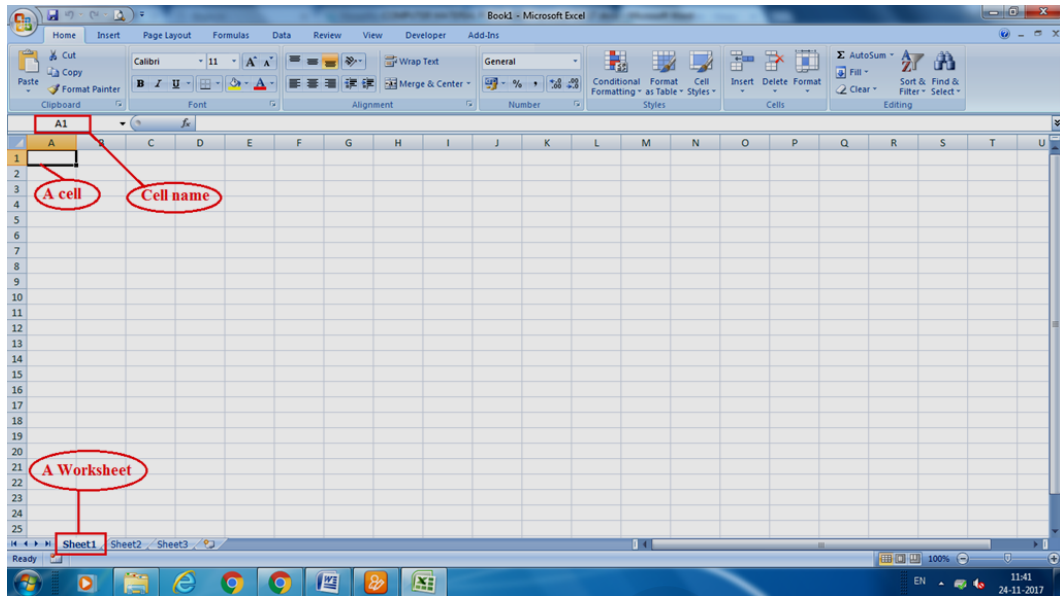


Figure 5.2: A worksheet

- An active cell is a cell which is currently selected. It will be highlighted by a rectangular box and its name will be shown in the name box. In the figure 5.2 A1 is the active cell.

3.8 Protection of Work book and Worksheet

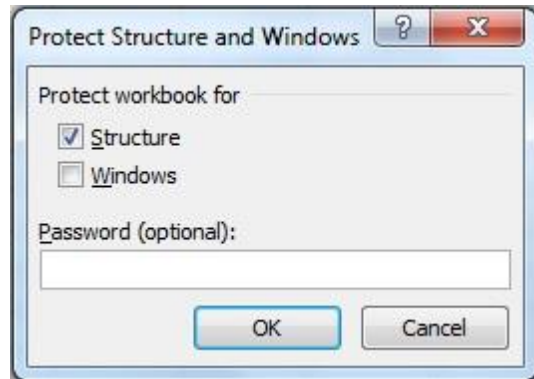
Workbook can be protected with a Password. This will restrict access to the workbook by preventing new sheets from being created or by granting access only to specific people.

Steps to protect the workbook

- Click on the **Review** menu.
- Click on **Protect Workbook** in the **Changes** group.
- The **drop down menu** appears as shown below,



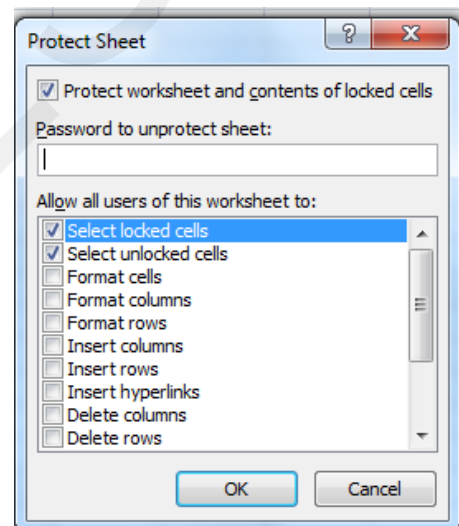
- Click on **Protect Structure and Windows** option to prevent unwanted changes to the structure of the workbook, such as moving, deleting or adding sheets.
- A dialog box appears as shown below,



- Type the password and Click on OK button

Steps to protect the worksheet

- Click on the **Review** menu.
- Click on **Protect Worksheet** in the **Changes** group.
- The **Protect Sheet** dialog box appears,
- Type the Password to unprotect sheet.
- Click on **OK** button.



EXERCISES

I. Fill in the blanks.

- 1) _____ function in Excel returns the current date & time.
- 2) In Excel , a function or formula always starts with _____ symbol.
- 3) _____ symbol is used to create absolute reference.
- 4) _____ and _____ charts are round / circular in shape.
- 5) By default, a work book consists of _____ number of work sheets.

II. Short answer type questions.

- 1) Explain different components of chart with help of a neat diagram.
- 2) What are the different types of cell reference in MS-Excel?
- 3) Explain different Statistical functions available in MS-Excel.
- 4) Explain different Text functions available in MS-Excel.
- 5) Define Sorting. Write the steps to sort the data in MS-Excel.
- 6) What do you mean by a function in Excel. Explain with one example. How it is different from a formula?

PRACTICAL EXERCISES

- 1) i. Create a table in a new workbook in MS Excel for Cricket Score Board. (With the fields S. No., Name, Runs/Score, Strike rate, No. of Sixes, No. of Fours and No. of Wickets taken).
ii. Sort the data based on the Alphabetical order (A to Z) of Name of the Player.
iii. Filter the records of the players who scored sixers.
iv. Highlight the cells in the run column where the score is less than 10 using conditional formatting.
- 2) Create any type of chart for the table “Cricket Score Board”.