

Introduction to Computers

Introduction

Computer system can be defined as an electronic machine that is used to generate information from raw data.

It performs various functions such as

- entering data,
- processing and storing it
- presenting output on the screen.

Let us know how a computer works:

A data or instruction is entered into a computer using keyboard. This data or instruction is called **input**.

The data is converted into a meaningful information with the help of CPU which is called **processing**.

After processing it, the result is displayed on the monitor. This is called the **output**.

A computer is divided into two parts: Hardware and Software.

This chapter includes

- ▶ Hardware
- ▶ Software
 - Type of Software
 - * System software
 - * Application Software



Hardware

Hardware refers to the part of computer that you can touch or feel. For example: CPU, Keyboard, Mouse, Printer, Monitor etc.

Computer hardware is divided into four parts:

- **Input devices:** It helps us in entering data. Keyboard and mouse are main input devices.



Keyboard

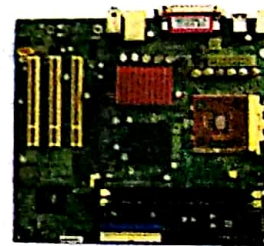


Mouse

- **Processing Unit:** It controls the functions of a computer. CPU, mother board are the examples of processing unit. It is also called the brain of a computer.



CPU Box



Motherboard

- **Storage Devices:** It is used to store the data and information. Hard Disk, CD/DVD, Pen Drive are some of the examples of Storage Devices.



- **Output Devices:** It displays the results. Monitor and Printers are main output devices.



Monitor



Printer

Software

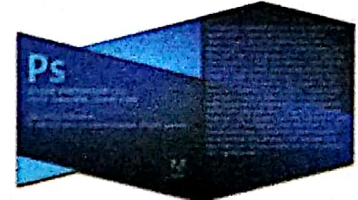
Software refers to a set of programs that performs some task in a computer. You can not touch and feel a software. A computer needs a software to work. Some of



MS Windows



MS Office



Adobe Photoshop

Types of Software

There are two types of software: System Software and Application Software. the popular software are MS Office, Windows, Photoshop, etc.

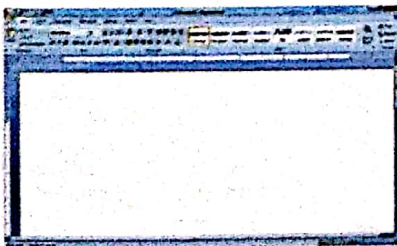
System Software/Operating System

System software control and manage all the functions and activities of a computer system.

System software that is needed to start other softwares is called Operating System. Windows is an operating system.

Application Software

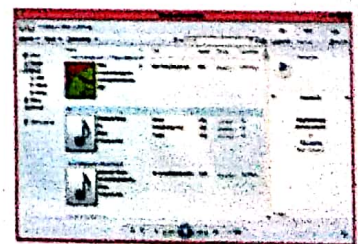
Software that help you to perform a specific task are called application software. MS Word, Photoshop, MS Paint, Window Media Player are some of the examples of application software.



MS Word



Ms Paint



Windows Media Player

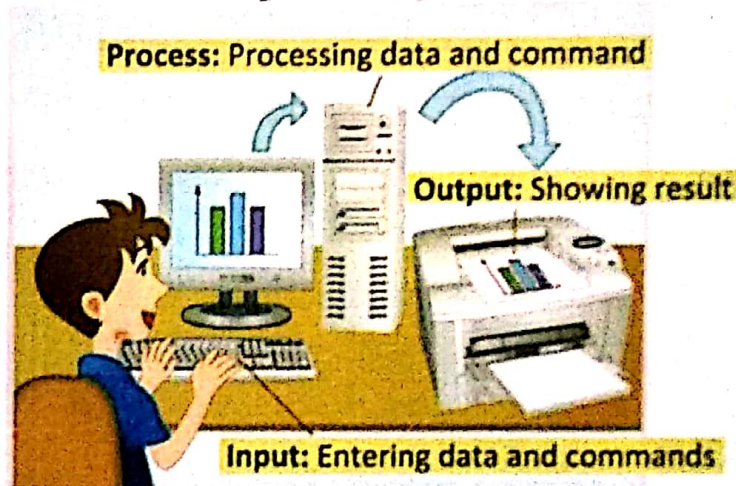
MS Word is used to write text only whereas MS Paint is used to draw and colour.

- Software which is built for a human user is application software for example MS Word, Photoshop etc.
- Software which is built to make the computer run better is system software for example Windows.

Process of computer (Input Process Output-IPO)

A computer is an electronic device that works on IPO cycle (Input-Process-Output). It primarily used to input data, process it to produce the required final output.

- **Input:** Input is the collection of data or instructions entered into the computer from input devices like keyboard, mouse.
- **Process:** To process or act on the input. It is mainly done by CPU or Central Processing Unit.
- **Output:** Output is the result obtained from processing activity. Output can be displayed on a screen or printed on paper. Certain output devices may function as storage devices also, for example: CD, pendrive etc.



Let's Summarise

- Computer can be defined as an electronic machine that is used to generate information from data.
- A computer is divided in two parts: Hardware and Software.
- Hardware and software must work together to get useful results in a computer.
- Computer hardware is divided into four parts: Input device, Processing device, Storage device and Output device.
- There are two types of softwares: System Software and Application Software.
- Software designed to operate the computer hardware and to provide a platform for running application software is called System Software.
- Softwares that help you to perform a specific task are called application softwares.

Terms.....

Hardware: Physical parts of a computer system.

Software: A code or program that is read by computer.

Devices: Instruments that are adapted for a particular task.

Input: To enter data into a computer.

Output: Result obtained using a computer or other device.

Exercise

I Fill in the blanks.

Hardware Computer Input output

- is a machine that is used to generate information from data.
- A data or instruction entered into a computer using keyboard is called
- After processing, the result displayed on the monitor is called
- refers to the part of computer that you can touch or feel.

II Write T for true and F for false for the following statements.

- A mouse is a hardware.
- A printer is a storage device
- Hardware and software are two parts of a computer.
- Output devices do not display the results.

III Match the following.

- | | |
|-------------|-----------------|
| 1. Keyboard | Output Device |
| 2. CPU | System Software |
| 3. Monitor | Processing Unit |
| 4. Windows | Input Device |

iv) Write one word for the following:

1. Converts data into a meaningful information.
2. A set of programs performs task in computer.
3. Brain of a computer.
4. One input device.

v) Write short answers.

1. What is processing?
.....
2. What are the two basic parts of computer system?
.....
3. Define output.
.....

vi) Write Long Answers.

1. What is the difference between Hardware and Software.
.....
.....
.....
2. Explain software and its types?
.....
.....
.....

vii) Multiple Choice Questions (MCQs)

1. Which of these is not a storage device?
a) CD b) Monitor c) Hard Disk d) Pen Drive
2. Which of the following is called the brain of the computer?
a) Monitor b) Hard Disk c) CPU d) Keyboard
3. Which one of them is not an application software?
a) MS Word b) Photoshop c) MS PowerPoint d) Windows
4. Which part of the computer displays both Input and output?
a) Monitor b) Hard Disk c) CPU d) Printer