

# INTRODUCTION TO COMPUTER

## **Computer**

A computer is an electronic device, is a programmable electronic machine used to store, retrieve, and process data. They are used to type documents, send e-mail, play games, browse the Internet, create presentations, event invitations, and listen to music or watch videos.

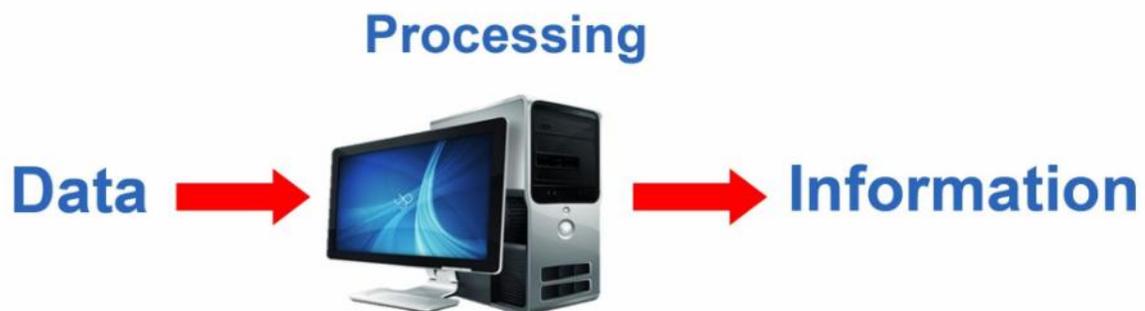
## Examples and types of computers



## Types of Computers

According to their size and performance, computers are classified into four categories:

1. Mainframes: Room-sized, expensive, high speed, very powerful, large storage capacities. It is used in large organizations like Banks and government departments.
2. Minicomputers: It do the same jobs as a mainframe, but on a smaller scale.
3. Super Computers: High capacity, very expensive. Usually used for research.
4. Personal Computers (PCs): It is small, not expensive and very popular, can be set on a table.



## Types of Software

The two main categories of software are application software and system software.

1. System software is a type of computer program that is designed to run a computer's hardware and application programs.

➤ Some examples of operating systems are:



Linux



➤ System software function



## Computer Components

A computer system consists of two main components: hardware and software. When combined, they become a computer system.

### Hardware

The physical parts of the computer system (electronic and mechanical parts), it cannot do any work by itself. it needs certain programs to do some work.

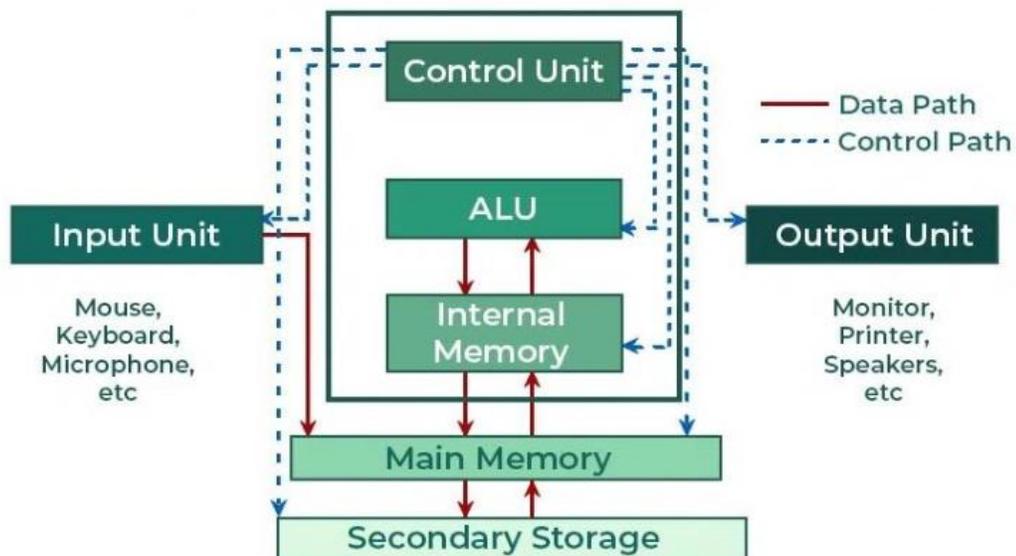
### Software

The programs and applications used with the physical computer to perform some tasks on computer system.

## Hardware Components

The major hardware components of a computer system are:

- Input devices
- Output devices
- Processor
- Memory



## Input Devices

Input Devices are any electronic device that are connected to a computer to allow the user to input (insert) data to the computer.

Input device is a peripheral (piece of computer hardware equipment to provide data and control signals to an information processing system such as a computer or other information appliance.

Input device Translate data from form that humans understand to one that the computer can work with. Most common are keyboard and mouse

| <b>Examples of Manual Input Devices</b>   |   |   |   |
|---|---|---|---|
| Keyboard<br>     | Numeric Keypad<br>   | Pointing Device<br> | Remote Control<br>   |
| Joystick<br>    | Touch Screen<br>    | Scanner<br>        | Graphics Tablet<br> |
| Microphone<br> | Digital Camera<br> | Webcams<br>       | Light Pens<br>     |

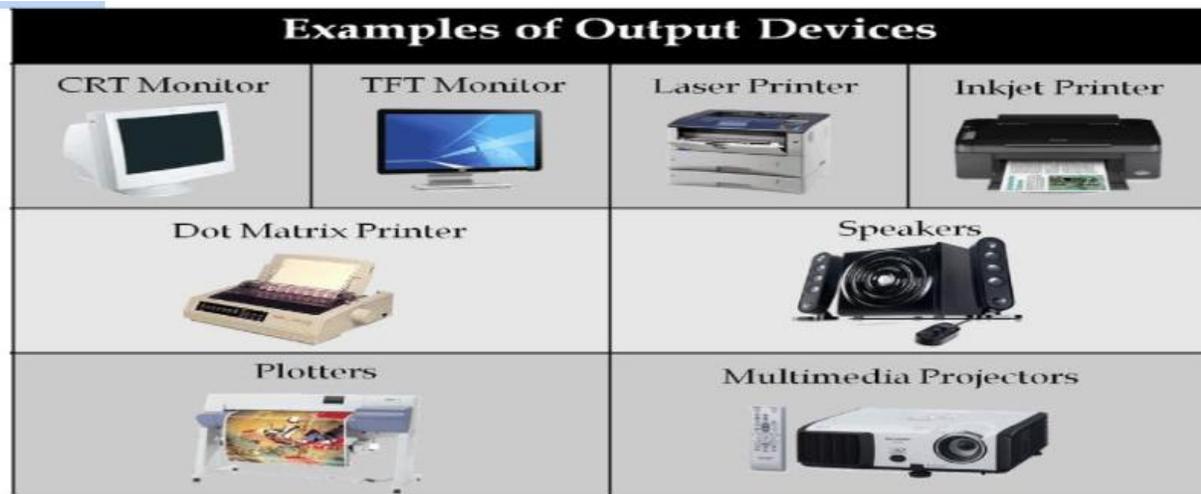
Example of Input Devices:-

|                            |                            |                |
|----------------------------|----------------------------|----------------|
| 1. Keyboard                | 2. Mouse (pointing device) | 3. Microphone  |
| 4. Touch screen            | 5. Scanner                 | 6. Webcam      |
| 7. Touchpads               | 8. MIDI keyboard           | 9.             |
| 10. Graphics Tablets       | 11. Cameras                | 12. Pen Input  |
| 13. Video Capture Hardware | 14. Microphone             | 15. Trackballs |
| 16. Barcode reader         | 17. Digital camera         | 18. Joystick   |
| 19. Gamepad                | 20. Electronic Whiteboard  | 21.            |

## Output devices

Output Devices: allow the user to output (display or print) information (readable form) from the computer.

An output device is any piece of computer hardware equipment used to communicate the results of data processing carried out by an information processing system (such as a computer) which converts the electronically generated information into human-readable form.



Example on Output Devices:

|                         |                                    |
|-------------------------|------------------------------------|
| 1. Monitor              | 2. LCD Projection Panels           |
| 3. Printers (all types) | 4. Computer Output Microfilm (COM) |
| 5. Plotters             | 6. Speaker(s)                      |
| 7. Projector            |                                    |