

Diploma in Hotel Management

Business Computing

Chapter 1

Introduction to Computer

Topic

- Definition of Computer
- Computer Basic Operations
- Categories of Computer
- Computer Parts
- Computer Basics Components
- Input Devices
- Output Devices
- Storage Devices
- Computer Software

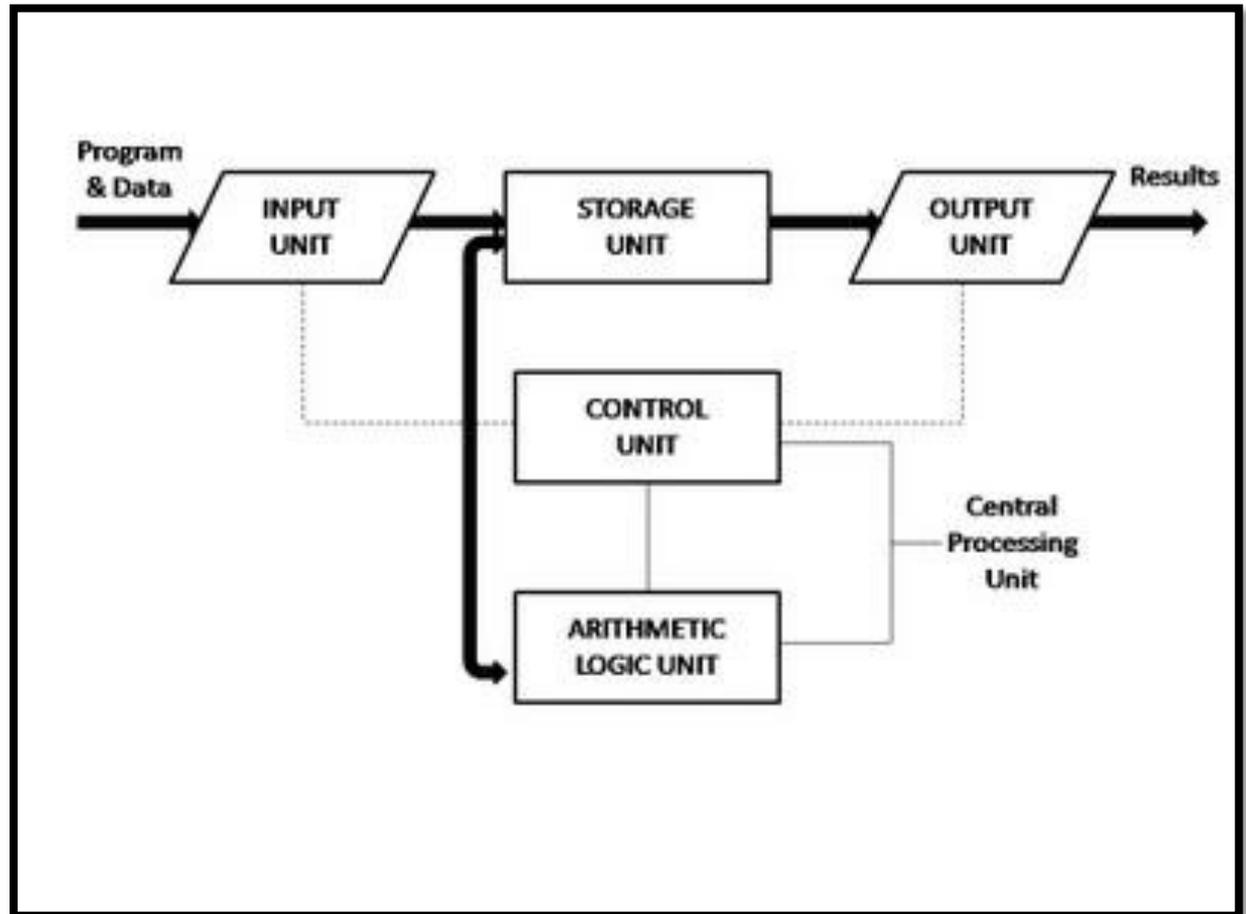
What is Computer?

- Computer is a machine that manipulates data according to a set of instructions.
- Computer is a programmable machine.



Computer Basic Operations

- Input
- Output
- Process
- Storage
- Control



Computer Basic Operations

- **Input:** It is the process of capturing or acquiring the information, or it is the process of accepting data or information, by using input the computer can do any process.
- **Process:** It is the transformation process to convert the input into output.

Computer Basic Operations

- **Output:** It is the result, which comes from the transformation process or it is the outcome of the process.
- **Storing:** It is the process of storing or retaining the data or information or instructions, so that the user can retain and retrieve it whenever required.

Computer Basic Operations

- **Controlling:** It is the process of directing the manner and sequence in which all the operations are to be performed.

Categories of Computer

- Mobile computer
- Microcomputer
- Mainframe
- Supercomputer

Categories of Computer



Laptop



Tablet

Mobile Computer



PDA



Smartphone



Carputer

Categories of Computer

Microcomputer



Desktop



Workstation

Categories of Computer

Mainframe



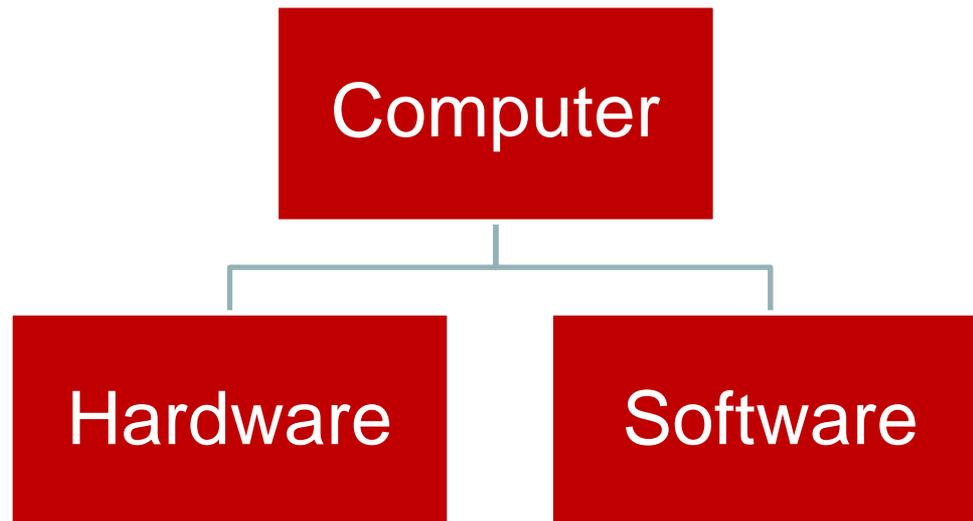
Categories of Computer

Super Computer



Computer Parts

- Computer can be divided into two parts:
 - Hardware
 - Software



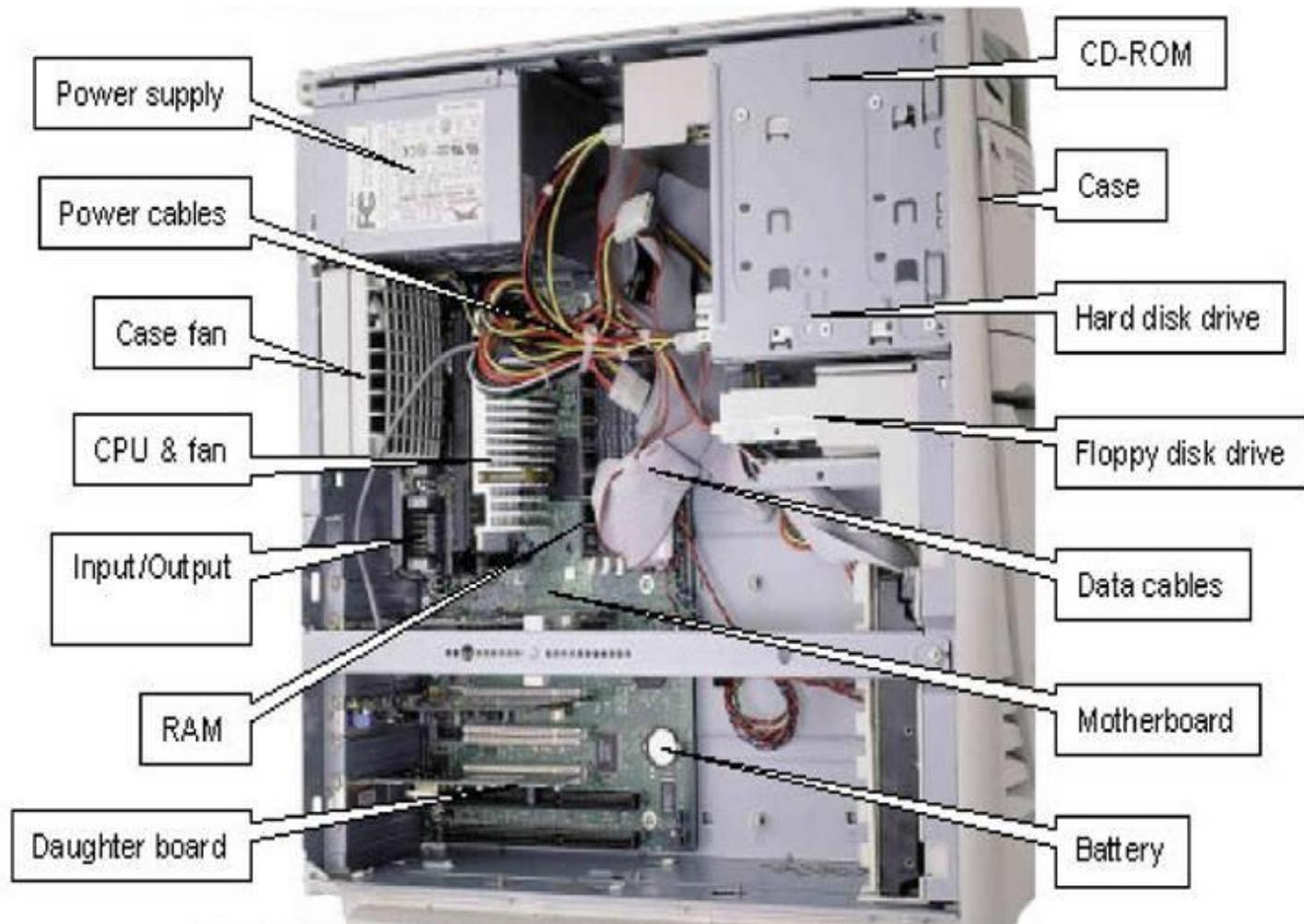
Computer Parts

- Hardware
 - System Unit
 - Input Devices
 - Output Devices
 - Storage Devices
- Software
 - Operating System
 - Application Software
 - Utility Software

System Unit

- The system unit is the core of a computer system.
- The most important of these components is the central processing unit (CPU), or microprocessor and random access memory (RAM).
- Almost every other part of your computer connects to the system unit using cables.
- The cables plug into specific ports (openings), typically on the back of the system unit.
- Hardware that is not part of the system unit is sometimes called a peripheral device or device.

System Unit



System Unit

- Motherboard
- Processor
- Memory
- Case
- Power supply
- Floppy drive
- Hard drive
- CD or DVD drive
- Video card
- Sound card
- Modem

System Unit

Case

- The case is the frame or chassis that houses the motherboard, power supply, disk drives, adapter cards, and any other physical components in the system.



System Unit

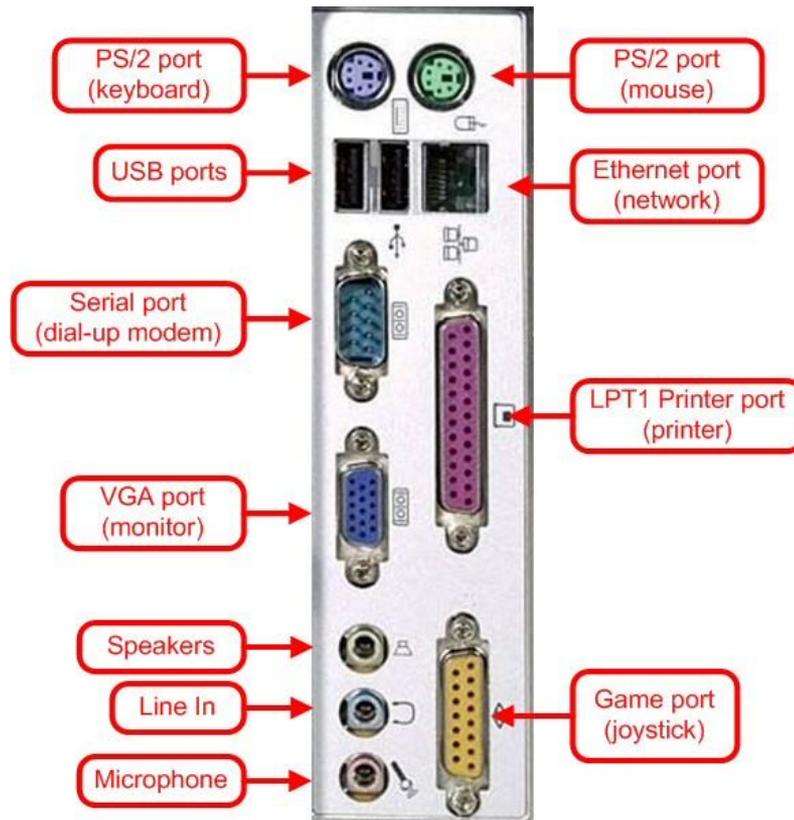
Motherboard

- Also known as main board, system board and planar.
- It connects all the components inside the computer case.



System Unit

Motherboard



System Unit

Processor

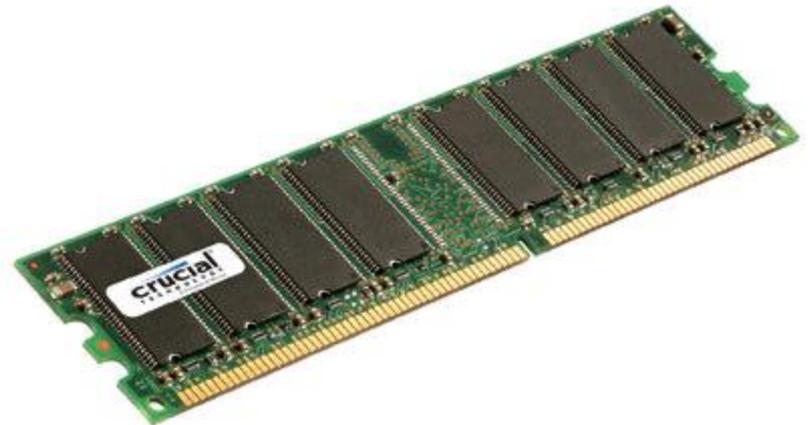
- The processor is often thought of as the "engine" or "brain" of the computer.
- It's also called the CPU (central processing unit).



System Unit

Memory

- The system memory is often called RAM (for random access memory).
- This is the primary memory, which holds all the programs and data the processor is using at a given time.



System Unit

Power Supply

- The power supply feeds electrical power to every single part in the PC.



System Unit

Floppy Drive

- The floppy drive is a simple, inexpensive, low-capacity, removable-media, magnetic-storage device.



System Unit

Hard Drive

- The hard disk is the primary archival storage memory for the system.



System Unit

CD or DVD Drive

- CD (compact disc) and DVD (digital versatile disc) drives are relatively high-capacity, removable media, drive optical drives; many recent systems include a rewriteable CD (CD-RW) along with or combined with a DVD-ROM drive.



System Unit

Video Card

- The video card controls the information you see on the monitor.



System Unit

Sound Card

- It enables the PC to generate complex sounds.



System Unit

Modem / Network Card

- Component that allow the computer to connect to the network or the Internet.



Input Devices

- Any peripheral (piece of computer hardware equipment) used to provide data and control signals to the computer.
- Allows the user to put data into the computer.
- Common input devices are:
 - Keyboard
 - Mouse
 - Touchscreen
 - Scanner
 - Webcam

Input Devices

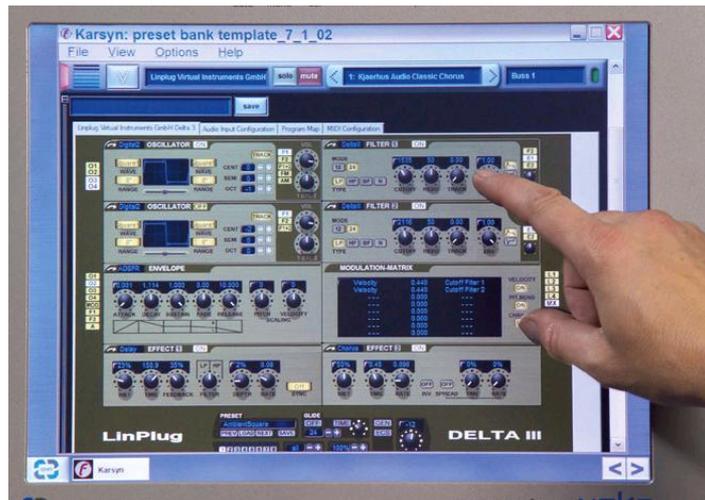


Keyboard



Mouse

Input Devices



Touchscreen



Scanner

Output Devices

- Any piece of computer hardware equipment used to communicate the results of data processing carried out by a computer to the outside world.
- Common output devices are:
 - Monitor
 - Printer
 - Speakers
 - Projector

Output Devices



Printer



Monitor

Output Devices



Speakers



Projector

Storage Devices

- Refers to computer components, devices, and recording media that capable of storing data.
- Examples of storage devices:
 - Floppy disk
 - Hard disk
 - Pen drive
 - Optical disk

Storage Devices



Floppy disk

- Capacity: 1.44MB
- Portable
- Require floppy disk drive to read/write

Storage Devices



Hard disk

- Capacity: 100GB – 1TB
- Not portable

Storage Devices



USB Flash drive

- Capacity: 8GB – 1TB
- Portable

Storage Devices



Optical disc

- Capacity:
 - CD: 650MB
 - DVD: 4.7GB
 - BD: 25GB
- Portable
- Require optical disc drive

Computer Software

- Software is the collection of computer programs, procedures and documentation that performs different tasks on a computer system.
- Examples of computer software:
 - Operating system
 - Application software
 - Utility software

Computer Software

Operating System (OS)

- A collection of software that manages computer hardware resources and provides common services for computer programs.
- The operating system is a vital component of the system software in a computer system.

Computer Software

Operating System (OS)

- Examples:
 - Windows
 - Mac OS
 - Linux
 - Unix
 - Android



Computer Software

Application Software

- **Application software**, also known as an **application** or an **app**, is computer software designed to help the user to perform specific tasks.

Computer Software

Application Software

- Examples
 - Word processor
 - Spreadsheet
 - Database Management System
 - Presentation software
 - Graphic editor
 - Video games



Computer Software

Utility Software

- **Utility software** is designed to help analyze, configure, optimize or maintain a computer.

Computer Software

Utility Software

- Examples:
 - Antivirus
 - Disk defragment
 - Screensaver
 - Disk cleaner
 - File manager



Tutorial

Answer all questions.

1. Define what computer is.
2. What are five basic computer operations?
3. What are four categories of computer?
4. Explain the difference between input device and output device. Give two examples for each devices.
5. Give four examples of Operating System.

Tutorial

Identify the following computer components:

