



## INTRODUCTION TO COMPUTER SYSTEMS (IT1020)

Year 1, Semester 1

Practical Answer Submission 01

22278944, Vikum Chathuranga Basnayaka

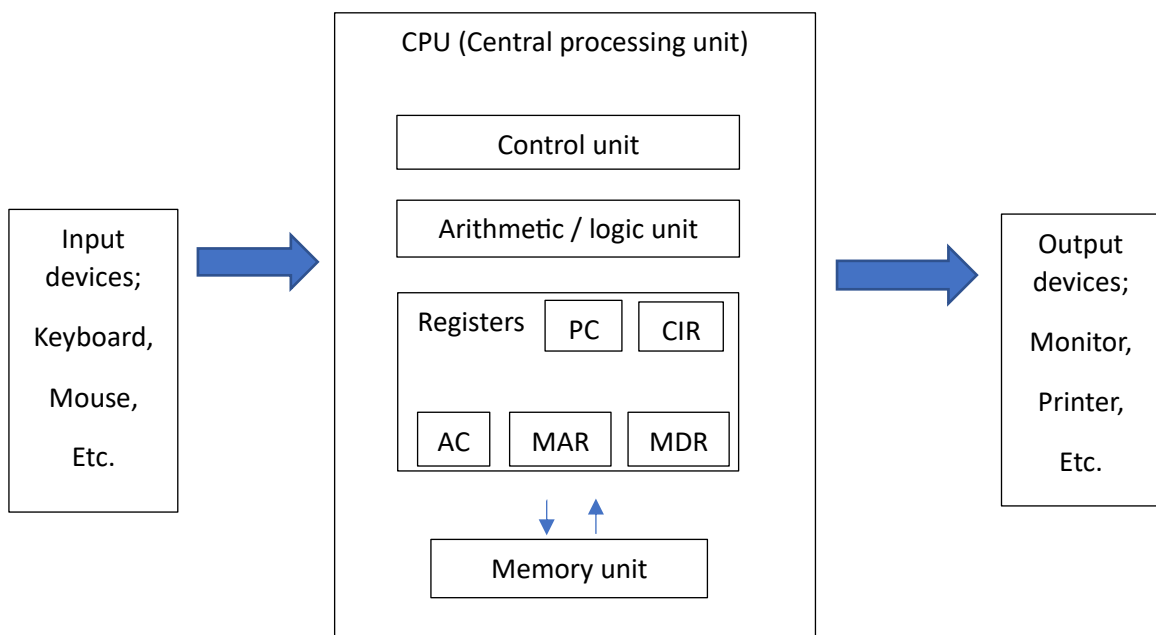
Y1.S1.WD.IT.17

30-10-2022

1. Describe what a computer system is. You can include diagrams with the description to answer this question.

- A group of mechanical and electronic equipment working together as one is referred to as a computer system. Depending on their function within the computer system, these devices can be categorized. The principal categories of device
  - (a) Input devices
  - (b) Processing devices
  - (c) Output devices
  - (d) Storage devices
  - (e) Communication devices
- A computer system comprises of hardware components that have been carefully picked so that they perform well together and software components or programs that run in the computer. The operating system that controls and offers services to other computer programs is the primary piece of software.
- Hardware refers to all of a computer's mechanical and electronic components. Examples include the following:
  - the motherboard, hard drive, RAM, power supply, processor, case, monitor, keyboard, and mouse.

Basic components of a computer system,



2. What are two types of software use in the computer? Briefly explain them with examples.

- Software is a nothing but set of instruction or set of programs are known as a software.
- System software and application software are the two primary subcategories of software. Software that carries out specific tasks or satisfies needs is called an application. System software is created to run the hardware of a computer and provide a foundation for programs to run on.
- There are three types of software used in a computer
  - ◆ System software
    - The purpose of system software is to serve as a platform for other software.
    - The operation of computer hardware is controlled and managed by system software.
      - E.g.: - Operating system (Microsoft windows, android, Linux, etc.)
  - ◆ Application software
    - Application software is the type of software that facilitates the performance of a particular type of tasks.
      - E.g.: - MS word, excel, etc.
  - ◆ Utility software
    - Utility software aids in the management, upkeep, and control of computer resources.
      - E.g.: - Antivirus software, backup software, Disk tools, etc.

3. List the characteristics of a computer system

- Speed –
  - ◆ Computers are extremely quick machines that can perform any type of calculation in a matter of seconds.
- Accuracy –
  - ◆ The computer's results are extremely accurate. Computer calculations are always 100% accurate.
- Automation –
  - ◆ Computers are automatic machines because they start a task and complete it once it is started.
- Versatility –
  - ◆ Computers are versatile tools because they are capable of a wide range of tasks.
- Storage –
  - ◆ Computers can store a lot of data because of their great storage capacity.
- Reliability –
  - ◆ Computers are trustworthy devices. that has a lengthy history of reliability. Because of this, today's enterprises all rely on computers to complete their tasks.

- Security –
  - ◆ The primary benefit of computers is that they provide us tremendous security.
- Diligence –
  - ◆ A computer is a machine that can perform any task continuously, flawlessly, and without break for 24 hours a day.
- Multitasking –
  - ◆ One fantastic aspect of computers is their ability to perform multiple tasks at once.
- Sharing –
  - ◆ We may be able to easily transfer data across computers thanks to computers.

4. “CPU is the brain of any computer” Discuss this statement

- Central processing unit is referred to as CPU. To manage the functions of the computer system, it offers the processing capability of a processor. The instruction is carried by the CPU when the program is running. It puts into action instructions like arithmetic and logical instructions. Data is moved about in this way. The brain of any computer is what it is referred to as a result.