

Introduction to Information Technology

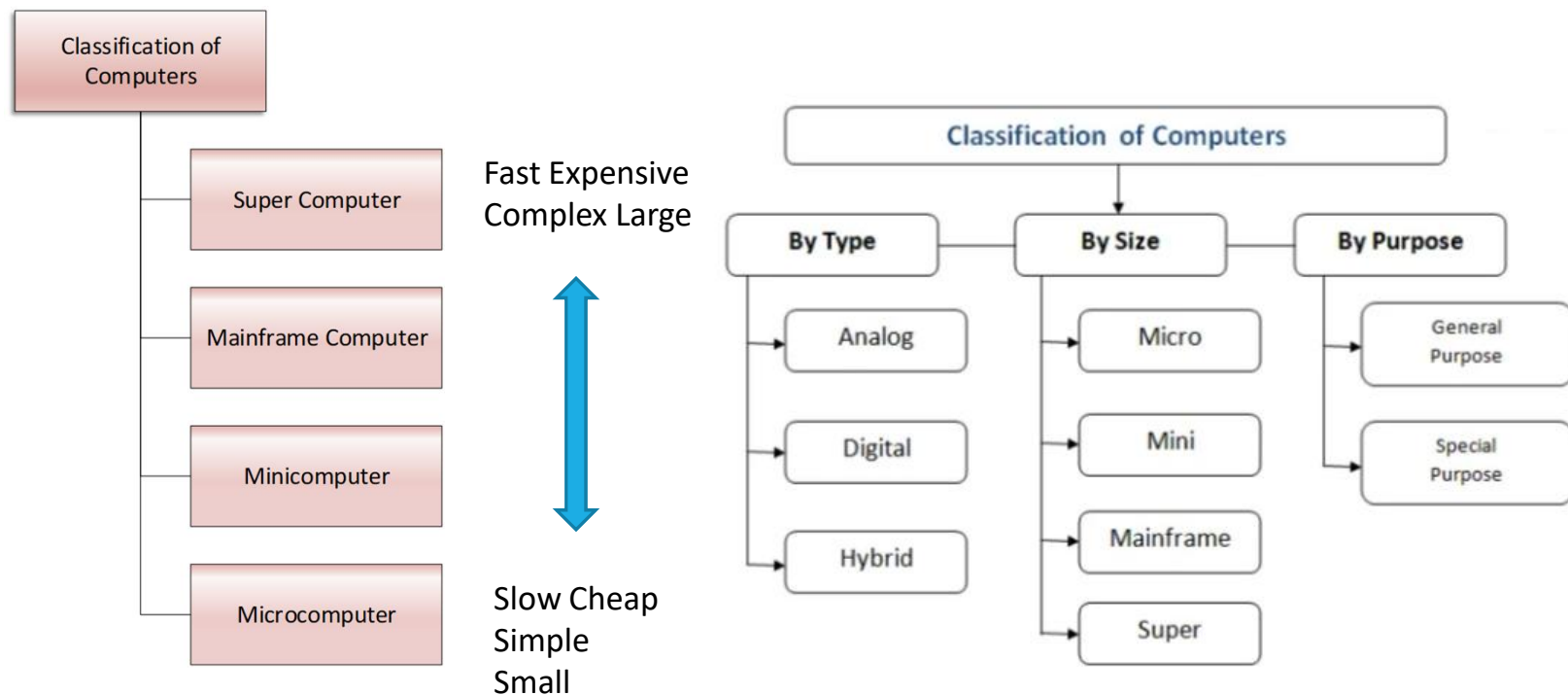


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1.6 Classification of Computers



Microcomputers

1. PCs (Personal Computers) / depend upon microprocessor
2. Small, Low-cost, Single user digital computer
3. Subcategorize as PC and Workstation
4. Consist of CPU, Input unit, output unit, memory (Storage unit) and software
5. Connect to network for multiuser application
6. PCs based on Pentium microprocessor and Apple Macintosh
7. Includes :-



Mini Computers

1. Posses most of the features of large computers
2. Multi user system (4-200)
3. Can access the mini computers through their PCs or terminal
4. Higher processing speed and high storage capacity than the microcomputer
5. Mostly used for real time application in industries



Mainframe Computer/ Father Computer

1. multi-user, multi-programing and high performance computers.
2. very high speed, large storage capacity and can handle the workload of many users
3. Multi Terminal access Mainframe computer; they cannot store data / processing
 1. Dumb Terminal & Intelligent Terminal
4. large and powerful systems used in centralized databases
5. Use in Banks, telecom industry, airlines, e-commerce, Industrial Orgn

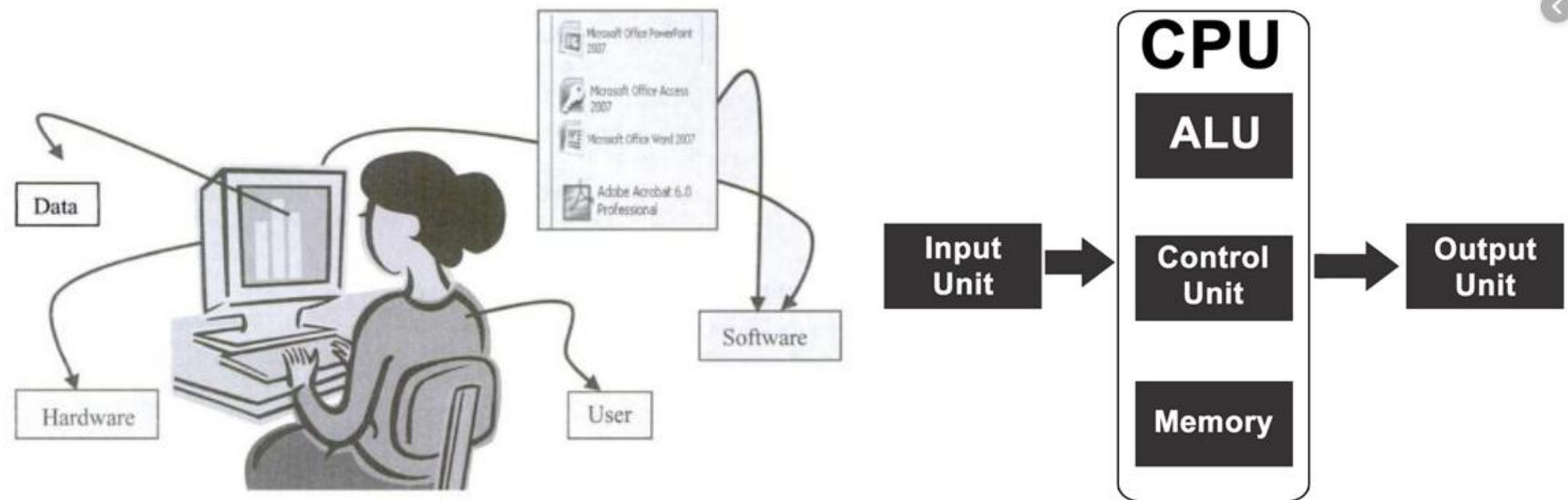


Super Computer

1. Fastest
2. Most Expensive
3. Highest Processing speed, measure in FLOPS (Floating point Operations per Second)
4. Interconnect thousands of processors, works parallel .
5. Weather forecasting, research, aircraft design etc, also use university, military agencies and scientific research laboratories, also used in neural networks, AI etc



1.7 The Computer System



1. **Hardware/ HW:** tangible part

- mechanical parts
- physical devices of the computer.
- HW devices are required for input, output, storage and processing of the data.

3. **Data:**

- themselves have no much significance.
- data is provided as input to the computer
- Input, Processed & Stored

2. **Software:** non-tangible part

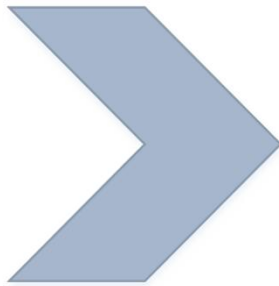
- set of instructions
- Program: 2 Types **System** and **Applications**
- Communication HW:
- Different software can be loaded on the same hardware to perform different kinds of tasks

4. **User:**

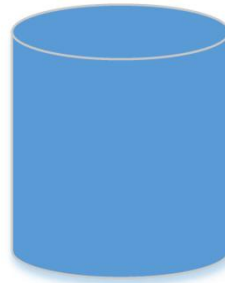
skinware, liveware, humanware or peopleware

1.7.1 Input-Process-Output Concept

- The concept of generating output information from the input data.
- (1) Accepts data, (2) processes data, (3) generates output, and (4) stores data.



INPUT



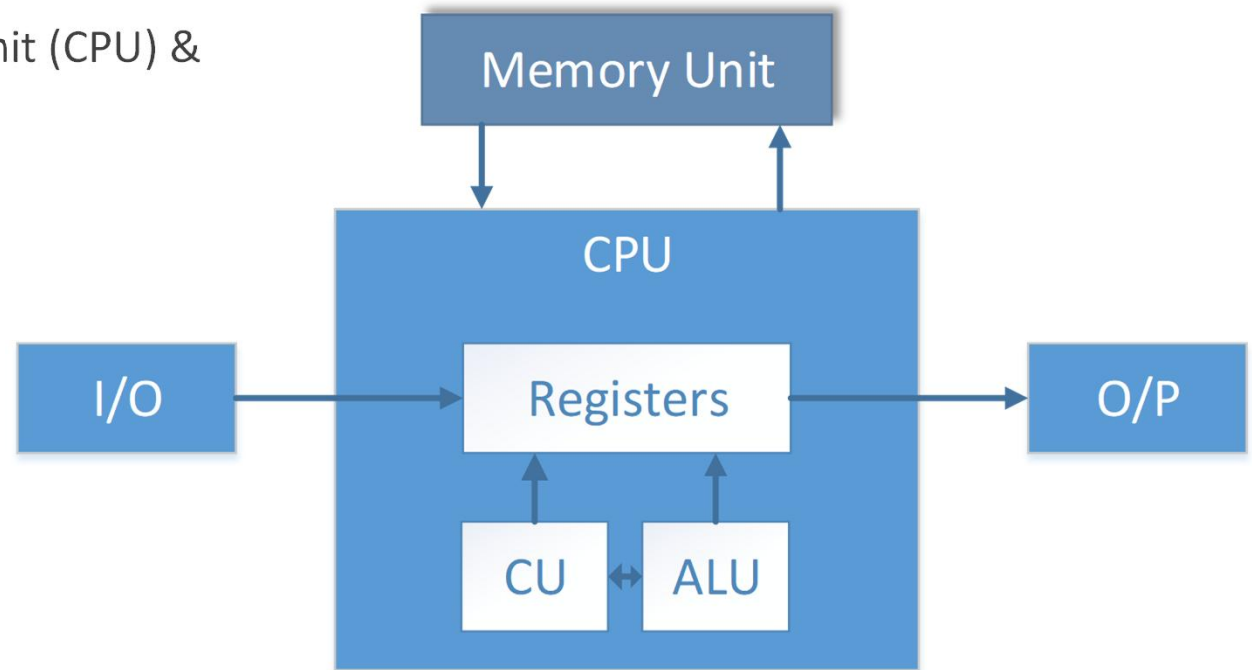
PROCESS



OUTPUT

1.7.2 Components of Computer Hardware

1. Input/Output (I/O) Unit
2. Central Processing Unit (CPU) &
3. Memory Unit



1.8 Application of Computers

Self Study

End of Chapter 1
