

Welcome to St. Monica's College

Course Title: Computer Studies Beginners



What is a Computer?

A computer is an electronic machine that is used to store **data** and process **information** in a variety of ways such as performing calculations and other LOGICAL Operations. It is made up mostly of solid state Integrated Circuits (IC).

Data – Raw Facts or Information that has not yet been processed

Information – Data that has been processed into meaningful form and that is valuable to the user



Limitations of a Computer

- A computer cannot think for it self.
- it cannot make moral judgment.
- it cannot take initiatives or in any way go beyond the information at its disposal.
- are needed to operate a computer hence the computer has one objective.
- GIGO - Garbage In Garbage Out.



Some Functions of a Computer

- Store customer data and Manage Inventory
- Send and receive e-mail
- Browsing the World Wide Web
- Playing Video and Audio
- Monitoring Security and Surveillance
- Perform various Financial Transactions
- Playing 3d Video Games
- Designing a House or Car



There are Two main Component of
a Computer:

- Hardware
- Software

What is Hardware?

The hardware is the physical (tangible) part of a computer that can be seen and touched

e.g.

- Mouse,
- Keyboard,
- Monitor,
- Base.





What is Software?

Software is a set of instructions which puts the hardware of the computer to work.

e.g.

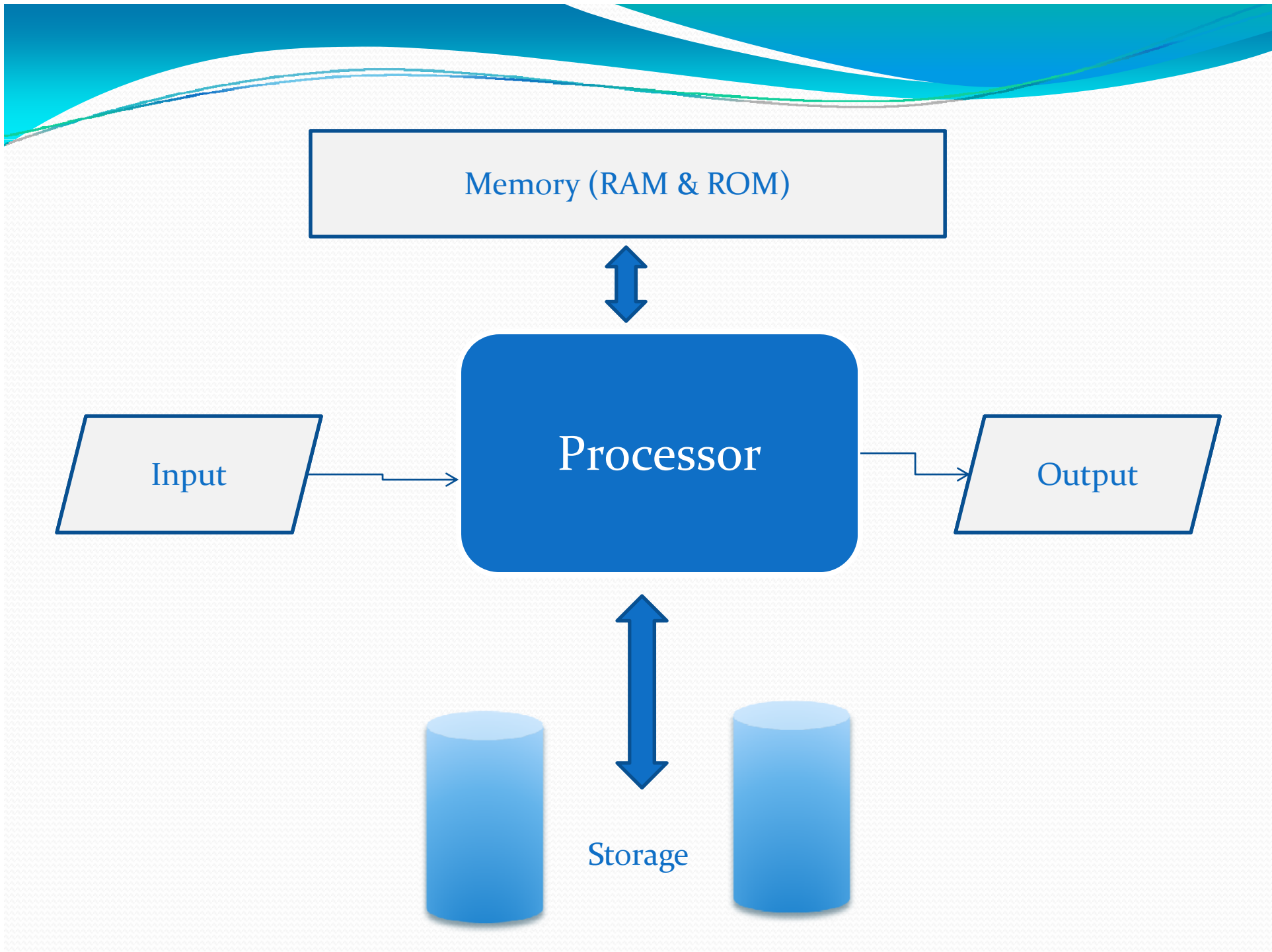
- System Software,
- Application Software
- Utility Software

HARDWARE

In This Section we will take a closer look at Hardware
and its components.

Hardware consists of the Following Categories:

- Input Devices
- Output Devices
- Memory Devices
- Storage Devices
- Processor / Micro-Processor



Input Devices: Devices that send Data to the Computer



Mouse



Keyboard



Scanner



Web Cam



Barcode Reader



Gaming Pad

Output Devices: Devices that receive information from a Computer



Monitor



Printer



Speakers



Plotter



Video Projector



Robotic Arm

Memory: Usable Brain Capacity of Computer



RAM – Means Random Access Memory, is only used when computers are turned on
When the computer is turned off the contents of RAM is Cleared.
All programs that run on the computer is temporarily stored in RAM.



ROM – Means Read only memory, chips are loaded with data and programs during manufacture and, unlike **RAM** (read-only memory) chips, can subsequently only be read, not written to, by computer

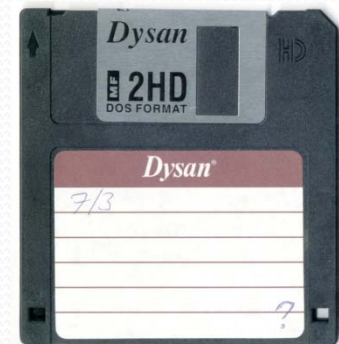
Storage Devices: Stores data permanently



CD / DVD



Hard Drive



Floppy Disk



USB Flash Drive



Magnetic Tape Device



Zip Disk

Processor: The Brain of the Computer



A microprocessor is a computer processor on a microchip. It's sometimes called a *logic chip*. It is the "engine" that goes into motion when you turn your computer on. A microprocessor is designed to perform arithmetic and logic operations that make use of small number-holding areas called *registers*. Typical microprocessor operations include adding, subtracting, comparing two numbers, and fetching numbers from one area to another. These operations are the result of a set of instructions that are part of the microprocessor design.