

Chapter 5

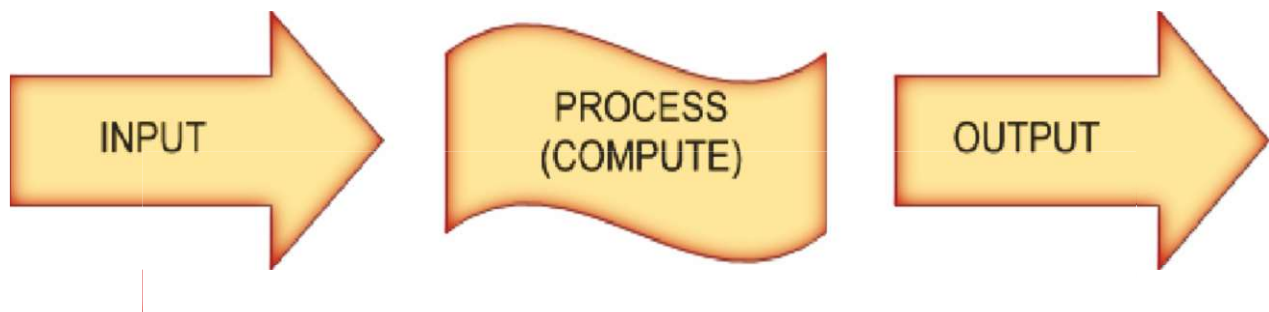
Computers Inside and Out



Computer = A machine which Computes

In this chapter we will learn different computer components.

But before that, let's draw the above computer definition in *pictorial* format.



⇒ Think about “Changing your TV Channel” from MTV to Star Sports and fill the following boxes

Input

Process

Output

⇒ Think about “Starting your scooter” and fill the following boxes

Input

Process

Output

⇒ Think about “Making a phone call” and fill the following boxes

Input

Process

Output

⇒ Think about “ATM machine” and fill the following boxes

Input

Process

Output

⇒ Think about “AC” and fill the following boxes to set the temperature as 22 degrees

Input

Process

Output

Hardware vs Software

Everything in a computer is either “**Hardware**” or “**Software**” !

Broadly speaking, **Hardware** refers to all the **physical components** of the computer and **Software** refers to all the **programs (or Instructions)** that tell these physical components to do something.

Hardware = Hard + Ware

Hardware is derived from the words “**Hard**” and “**Ware**”.

Hard means the physical and Ware means a product. So a **physical product of a computer is Hardware**.

These physical components **can be seen and touched**.

Software = Soft + Ware

Software is derived from the words “**Soft**” and “**Ware**”.

It is called soft because you **cannot touch** them. They are not present in any physical form.

These are a set of **instructions** that tell the hardware to do specific tasks.



Let's Compare:

Hardware	Software
It is also known as HW	It is also known as SW
Physical components of computer system	Set of programs or instructions that enables the hardware to perform specific task
It is manufactured (Factory-made)	It is developed or engineered (Created by software engineers)
It can be seen and touched	It can be seen and used but cannot be touched
Hardware cannot perform any task on its own. It needs software to tell what to do.	Software cannot perform any task on its own. It needs hardware where the program will execute a specific task.
It is not affected by computer virus	It is affected by computer virus
Example: Keyboard, Mouse, Monitor	Example: iCodeT, Computer Paint, Computer calculator



HARDWARE



SOFTWARE