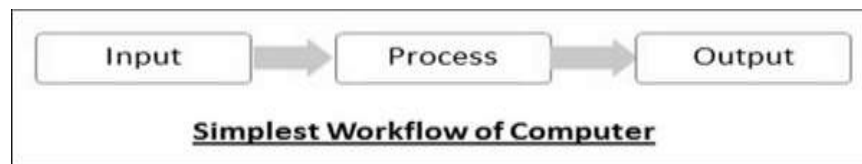**"Progress lies not in enhancing what is, but in advancing toward what will be."**
...Khalil Gibran

- **Sedulous**: showing dedication and diligence

    – E.g. He watched himself with the most sedulous care.

- Net neutrality is the principle that individuals should be free to access all content and applications equally, regardless of the source, **without Internet Service Providers discriminating against specific online services or websites.** In other words, **it is the principle that the company that connects you to the internet does not get to control what you do on the internet.**

- **What's a Computer:**
    o Computer is an electronic device that receives input, stores or processes the input as per user instructions and provides output in desired format.

Input → Process → Output

Simplest Workflow of Computer

    o Computer input is called data and the output obtained after processing it, based on user's instructions is called information.

Input (Data) → Processing Of DATA → Output (Information)

    o Raw facts and figures which can be processed using arithmetic and logical operations to obtain information are called data.
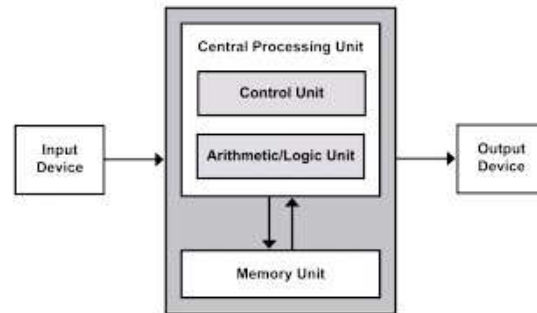
- **Data vs. Information:**
    o Data is defined as the collection of facts and details like text, figures, observations, symbols or simply description of things, event or entity gathered with a view to drawing inferences. It is the

raw fact, which should be processed to gain information. It is the unprocessed data, that contains numbers, statements and characters before it is refined by the researcher.

- **The term data is derived from Latin term 'datum' which refers to 'something given'.**

o Information is described as that form of data which is processed, organised, specific and structured, which is presented in the given setting. It assigns meaning and improves the reliability of the data, thus ensuring understandability and reduces uncertainty. When the data is transformed into information, it is free from unnecessary details or immaterial things, which has some value to the researcher.

- **The term information discovered from the Latin word 'informare', which refers to 'give form to'.**

BASIS FOR COMPARISON	DATA	INFORMATION
Meaning	Data is unrefined facts and figures and utilized as input for the computer system.	Information is the output of processed data.
Characteristics	Data is a individual unit which contains raw material and doesn't carry any meaning.	Information is the product and group of data which collectively carry a logical meaning.
Dependence	It doesn't depend on Information.	It relies on Data.
Peculiarity	Vague	Specific.
Measuring Unit	Measured in bits and bytes.	Measured in meaningful units like time, quantity, etc.

- **Basic Parts of a Computer:**

Block diagram of computer system

- o **Input Unit:**
  - Devices like keyboard and mouse that are used to input data and instructions to the computer are called input unit.
- o **Output Unit:**
  - Devices like printer and visual display unit that are used to provide information to the user in desired format are called output unit.
- o **Control Unit:**
  - As the name suggests, this unit **controls all the functions of the computer**. All devices or parts of computer interact through the control unit.
- o **Arithmetic Logic Unit:**
  - This is the brain of the computer where all arithmetic operations and logical operations take place.
- o **Memory:**
  - All input data, instructions and data interim to the processes are stored in the memory. Memory is of two types – **primary memory** and **secondary memory**. Primary memory resides within the CPU whereas secondary memory is external to it.
- o **Control unit, arithmetic logic unit and memory are together called the central processing unit or CPU.**