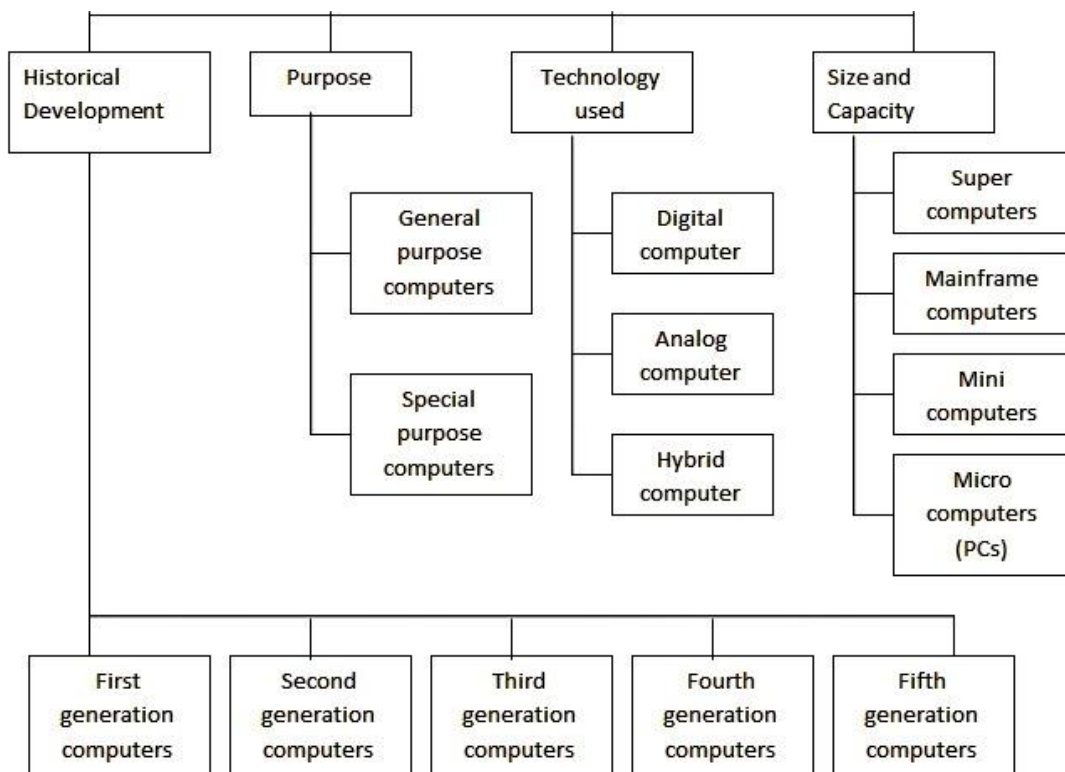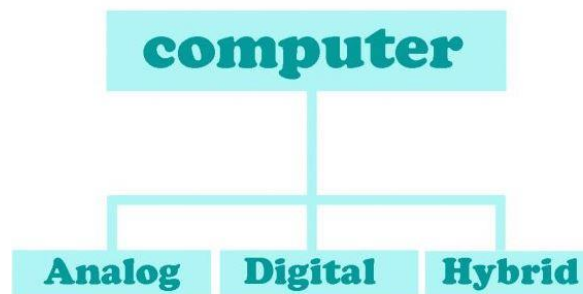## Computer Fundamental

Types of Computer

Classification Of Computer

❖ **Technology Uses / Data handling capabilities / Based on Work**
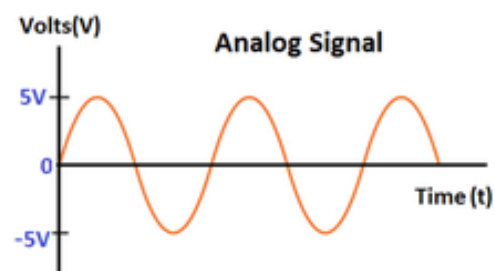
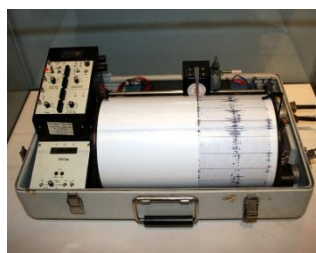## 1. Analog Computer (एनालॉग कंप्यूटर)

These computers carry out arithmetic operations by manipulating and processing of data. Mainly this type of computer work on physical quantities such as voltage, current, and temperature. Example - Speedometers, seismograph, In ships, Analog clock, In aircraft altimeter, etc

❖ **Some characteristics of Analog Computers**

- Continuous values
- Small memory
- Slow speed
- Not as reliable
- Results are not accurate
- Difficult to use

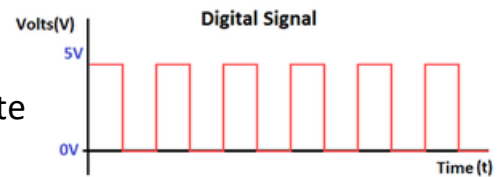| Speedometer | Seismograph | In Aircraft |

2. Digital Computer (डिजिटल कंप्यूटर)

Digital computers operate using Two discrete/Different binary digits – 0's and 1's. A digital computer, not only performs mathematical calculations, but also store and process data in binary form to produce text, graphics, audio and video

Example – Desktop / Laptop (PC), Smartphones & Tablets,Digital Weighting Machine,Digital Speedometer, Digital Calculator, ATM, Digital Clock, etc

❖ **Some characteristics of Digital Computers**

- Discrete values
- Large memory
- Faster speed

- Very reliable
- Result are 100% accurate

3. Hybride Computer (हाइब्रिड कंप्यूटर)

Hybride Computer is a combination of both computer - analog computer and digital computer.

This type of computer for input take analog computer and processing or calculating in digital computer and output may be analog/digital both form.This types of computers mainly use in Defence, scientific and Medical field.

Example – Electrocardiogram/ECG (measure heart activity), **Ultrasound Machine (**high-frequency sound waves produse), **Forensic,** Defence etc

ECG

Ultrasound Machine

Scientific use

For Research

For Defence

❖ Difference b/w Analogue, Digital and Hybrid Computer

SI. No	Analog	Digital	Hybrid
Definition	Analog computer process data in a continuous form,representing physical quqntities like temperature, pressure, or voltage	Digital computers operate using Two discrete/Different binary digits – 0's and 1's.	Hybride computer combine the features of both analog and digital
Complexity	Analog computers are not easy to use.	Digital computers are easy to use	Easy compare to analog computer
Architecture	Analog Computers have a complex architecture.	The architecture of digital computers is not as complex	
Readability	Analog computers have low readability(पढने योग्य) .	Digital computers have high readability.	Both Some date readability and some date not readability
Accuracy	Moderate	High	High
Uses	Analog computers are used as special purpose devices.	Digital computers can be used as a general purpose device.	Hybride computer can be specialized / manufacturer for specific work
Speed	The processing speed of an analog computer is low.	The processing speed of a digital computer is high.	Combines Both
Example	Speedometer,….	Laptop,….	ECG,….

===================HIRA KUMAR======================