INTRODUCTION TO OPERATING SYSTEMS AND NETWORKS

AGENDA:-

OBSERVATION→SOFTWARE AND HARDWARE→NETWORKS

OBSERVATIONS:-

- **Observation is a very important thing. We have to observe everything around us.**

WHY OBSERVATION IS IMPORTANT?

- **If we observe carefully, we can able to find different patterns. By identifying patterns we can able to ask questions.**
- **Asking questions is very important because it shows our curiosity. "ONLY CURIOUS MINDS WILL LEARN."**
- **Curiosity is the basis of human intelligence.**
- **Observation is a very important skill.**

SOFTWARE:-

- **Software is the set of instructions to the hardware.**
- **It is easily Changeable.**
- **It is flexible.**

HARDWARE:-

- **The components which we can touch and when electricity is not present also we can able to see them.**

OPERATING SYSTEMS:-

- **It is the boss of the computer.**
- **O.S is the main software that makes the other softwares work with the hardware.**
- **O.S is the interface between hardware and software.**

DIFFERENT TYPES OF OPERATING SYSTEMS:-

- **O.S can be in computer and mobile.**
  COMPUTER O.S:-
- **Windows 10,Ubuntu,Mac OSX etc……**
  MOBILE O.S:-
- **Android 11,ios13 etc…..**
- **Mac OSX is the operating system present in apple.**
- **Ios13 is the operating system present in apple phone.**
- **When we make a software the initial one we call it as a version 1.**
- **If we add a major functionality to it we call it as a version 2,version 3,etc…**
- **If we add a minor functionality to it we call it as a version 1.1,1.2,etc…**

NETWORKS:-

- **Computer network that interconnects billions of computing devices throughout the world.**
- **The connection between two devices is called network.**
- **Collection or group of networks is called internet.**
- **Let us take an example as follows:-**
- **Let's say we have a message "HOW ARE YOU ?". This message is broken down into Smaller parts as HOW ARE YOU**
- **These broken parts are called as packets.**
- **These packets are transmitted through networks.**
- **After transmission, these packets will reassemble in it's original positions.**
- **After completion these messages will get delivered to the desired location.**
- **Here, the original message is called as Data.**
- **We define data as "Any information that has to be stored".**

- **This Data is broken down into packets.**
- **Entire data can't be transformed in a single packet.**
- **The connection between two networks is called as a junction.**
- **The technical term for junction is "Router".**
- **The path in which we go to the desired network is called "Route".**
- **We will have multiple routes. We will choose the best route.**
- **Traffic between the networks is called "Congestion".**

CLIENT AND SERVER:-

- **Client →One that requests.**
- **Server→One that responds to the request.**
- **Exchange of information between client and server happens over the internet.**

INTERNET BROWSERS:-

- **Browsers acts a interface to search the contents.**
- **Examples:- Chrome, Safari, Edge.**
- **It is the client that communicates with the server.**