**Day 1:**

Data Structure :

Data : Raw fact , data can be in any format like number, string, boolean, array type, object type etc.

Information : processed data or meaning full data.

A data structure is a way to organized and store data so it can be accessed and modified efficiently.

Data types : data type is a type of data which tell what type of value it can hold.

To store the value in variable we use var, let and const keyword.

var a;

var b=100;

var name = “Ravi”;

Types of data types

1. Primitive data types : it is use to store in value of any type.

Number

String

Boolean

Null

Undefined

1. Non primitive data types or reference data type : it is use to store value as well as reference of another data types.

2 sub types

1. Linear data type : it store the data in sequence order

Array

Stack

Queue

LinkedList

1. Non linear data types : it doesn’t store in sequence order.

Tree

Graph

1. Object type

It can be pre defined object or user defined object

Date, Document, Window, String , Math etc.

Searching and sorting technique

Space and time complexity very important.

JavaScript Vs Node JS :

Before node JS JavaScript is/was known as client side scripting language. It run on client machine in browser environment. Client side scripting language doesn’t provide any features to store the data in file system, data base system etc.

Backend technologies or server side technologies.

Java or spring boot

Asp.net

Python with Django / flask

Node js

After node js JavaScript also known as client side as well as server side scripting language. With help of node js we can run JS code outside browser environment. Node js provided lot of pre defined **modules** which help to store the data in file system or database system, it provide security features, it help to develop rest api etc. JWT (JSON Web Token) .

Node REPL Terminal (read eval print loop)

Client side JS provide BOM and DOM.

Server side or node js doesn’t provide BOM and DOM etc.

Array : array is known as reference or non primitive data types which is use to store more than one value of different types in JS(like C , C++ or Java it store same data types of values). In C or C++ or Java array is known fixed in memory.

In JS array is known as dynamic array.

int num[]=new int[10]; only 10 values.