1.2

<http://www.google.com> -🡪 URL

req (http/https)----🡪

Client Server

🡨-Res(http/https) html 🡪

Css 🡪

JavaScript 🡪

DOM

Library as well as Framework

To improve dom functionality

Frontend technology🡪 html, css, javascript, jquery, typescript, angular , react js , vue js etc.

Html -🡪 login page of gmail.com

Rest API

Backend technology 🡪

Java

Python

Asp.net

Php

Node JS

Etc

Database or file system

Backend technology -🡪 Java

Java --🡪 Basic Java Programming -- .Welcome Program

Data types

Operators

Sequence

If statement or conditional statements

Switch statement

Looping

While loop

Do while loop

For loop

For each loop

For in loop

For of loop

Function or method or modules or procedure

Types of functions

Pre defined function

User defined function

Basic programming

Program : set of instruction to perform a specific task.

Input : initialization, keyboards, from file, database, network, cloud etc

Process business logic

Output : console, browser, device screen, stored in file / database, network, cloud etc.

Algorithms : a set of instruction for solving the particular problem statements.

1. Start
2. Read a, b
3. Compute sum = a+b
4. Write or display sum
5. Stop

Flow chart for the algorithms

It is graphical or pictorials representation of an algorithm is known as flow chart .

Find largest of two numbers

Read a, b

If a > b

Yes No

B is big

A is big

Procedure Language : C is a type of basic structure or procedure language.

Pro-processing instruction

Global declaration

Function (pre defined or user defined)

Local variable declaration

Set of statements.

#include<stdio.h>

void main() {

printf(“Welcome to C language “);

}

demo.c

Compiler : compiler convert whole code into another native format which help to run the program.

C is a type of compiler language

Interpreter : it check the code line by line

JavaScript is a type of interpreter language.

Java is a compile as well as interpreter.

Transpiler

JavaScript

var a=10;

a=”Raj”;

.js

Typescript : typescript is a super set of JavaScript which support data types.

var a:number =100;

a=”Ravi”;

.ts

OOPs : Object Oriented Programming

struct Employee {

int id;

char name[10];

float salary;

};

void main() {

Employee emp;

print(“%d”,emp.id);

}

void mno() {

}

void xyz() {

mno();

}

void abc() {

xyz();

}

void main() {

abc();

}

Function are tightly coupling. OOPS language provide loosely coupling.

Void main() {

Employee emp = new Employee();

emp.readEmp();

//emp.salarySalary();

//emp.DisplayEmployee();

}

void operation() {

}

void add() {

}

void sub() {

}

object : object is any real world entity.

Properties or state -🡪 have 🡪 fields, variables

Int, float, double, number, char, string, boolean, etc.

Person teaching(), sleeping(), walking(), talking() etc.

Behaviour -🡪do/does functions / methods

Bank

Animal

Wheel, colour, price etc

Car

Start(), appliedGear(), moving(), stop()

Mobile

Laptop

Pen

Customer

Bank

Account

Object is a concept.

class : class is blue print of object or template of object

Car innova = new Car();

Car santro = new Car()

Car bmw = new Car();