**What is Java**

Java is platform independent and pure object oriented programming language.

1. Simple
2. Compile and interpreter
3. High secure
4. Exception handling
5. Multithreading
6. Portable
7. Platform independent.

Object : any real world entity.

State or property (have)--🡪variables, fields.

Person

Behaviour (do/does) --🡪 function/ methods

Bank

Animal

Car

Employee

Customer

Mobile

Object is concept.

Class : Blue print of object or template of object or user defined data type which help to create the object.

Syntax of class

class Demo {

fields or variables;

methods/ functions

pre defined methods

public static void main(String args[]) {

System.out.print(“Welcome to Java”):

System.out.println(“Welcome to Java”):

System.out.printf(“Welcome to Java”):

}

}

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

2 types.

1. Primitive types : it is use to store only values. 8 types.
   1. byte 1 byte
   2. short 2 byte
   3. int 4 byte
   4. long 8 byte

without decimal

* 1. float 4 byte
  2. double 8 byte

with decimal

* 1. char 2 byte single character
  2. boolean 1 bit true or false values

1. Non primitive types or reference : it is use to store value as well as reference of another data types.
   1. array
   2. class (pre defined or user defined)
   3. interface (pre defined or user defined)
   4. enum
   5. annotation

**type casting**

converting one data type to another data types.

1. Implicit type casting
2. Explicit type casting

Int family

Implicit

byte short int long

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🡨-----------------------------------------------------

byte short int long

explicit

in java by default any decimal double consider