# Class & Object

#### Class -

- The variable inside class are known as data member and the methods are known as member method
- In class data member describe the properties of the object and methods describe the behaviour of the object.
- Class is a blueprint for an object.
- Before creating an object in JAVA, we need to define a class.
- When a class is defined, no memory space is allocated but when an object of that class is created then memory space is allocated(reserved).

#### Defining a Class

Java provides a keyword class to define a class. The keyword must be followed by the class name. Inside the class, we declare methods and variables.

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### Object -

- An object is a real implementation of class .
- Without class, object never exist.
- We can create any no. of object of a class.
- Objects of class holds all those data and methods which are available with in the class i.e each object have a separate copies of data member and methods.

# CONSTRUCTOR

- Constructor is a special type of member function of a class which is used to construct and initialize object of a class. So, it is a special method. Science it has special properties or characteristics as follows:-
- Name of the constructor is similar to the name of the class.
- Constructor does not have return type even void.
- When an object is created, constructor is executed (call automatically).
- Similar to the general method, the programmer can also pass argument to the constructor.
- For each object creation constructor call one time. (Ex- if 5 object is created then 5 times constructor is automatically call.)
- Constructor always keep with in the public section of the class.

• We have to keep only one constructor with in a class without using overloading concept.

### **■**Types of constructor:-

- 1. Default constructor
- 2. Argumented constructor or (parameterized constructor)

- <u>Default constructor</u> -> It is a type of constructor and it does not take any argument i.e If any constructor have no argument then it is called as default constructor.
- Argumented constructor -> It is a type of constructor and this constructor take argument.

The purpose of this constructor is to create and initialize the object.

■ NOTE - If there is no any constructor define with in a class, then in such case compiler internally works on default constructor

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