



- Constructors -

In java is just like C++, or any other objected oriented language, we have the concept of Constructor which are special member function of a class with following important features:-

- 1) Their name is exactly same as the name of class
- 2) They do not have any return type, not even void and they do not return any value.
- 3) They are automatically called by java as soon as the object of a class get created. Since the java, object creating happen at Run time so we say

that Constructor Calling also happens at runtime.

4). In java, if we mention the Return type with a Constructor then although the code will compile and run i.e. no Syntax or Run time Error will appear, but java will not consider it to be a Constructor anymore and will not call it automatically on object creation. In other words it will become just like any other ordinary method.

5). In java if a programmer does not define any Constructor in his class on his own then the Java Compiler automatically inserts an empty Body Constructor in our class called as the default Constructor.

Example

Class Account

```
{
    private int acctId;
    private String name;
    private double balance;

    public Account()
    {
        acctId = 101;
        name = "Amit";
        balance = 50000.0;
    }

    public void show()
    {
        System.out.println("acctId" + acctId + "name" + name + "balance" + balance);
    }
}
```

Class UseAccount

```
{
    public static void main (String args[])
    {
        Account A = new Account();
        A.show();
    }
}
```

- 1 Parametrized Constructor :-

Just like we can have parametrized member function, similarly we also can have parametrized Constructor in the class.

That is a Constructor can also accept argument

Special Note:-

But if a class has only parametrized Constructor, then we must remember that every object of that class which we are going to create must also be parametrized.

Syntax of parametrized Constructor:-

```
public <Name of class> (list of argument)
{
    // body
}
```

Calling of parametrized Constructor:-

<class name> <obj reference> = new <class name> (list of arguments)

Example 1:

Class Account

{

private int acctId;

private String name;

private double balance;

public Account (int id, String str, double bl)

{

acctId = id;

name = str;

balance = bl;

}

public void show()

{

System.out.println ("acctId" + acctId + " name" + name + " balance" + balance);

}

}

Class UseAccount

{

public static void main

{

Account A1

A1 = new Account (101, "Amit", 50000);

A1.show();

}