

Constructors

- A Constructor in Java It is a special method that is used to initialize objects.
- The Constructor is called when an object of a class is created.
- Everytime an object is created using the new() keyword, atleast one constructor is created.

Rules

- (i) Constructor name must be same as its class name.
- (ii) It must have no return type.
- (iii) It cannot be abstract, static and final.

Example (Default Constructor)

```
class Bike  
{
```

```
Bike()
```

```
{
```

```
    System.out.println("Bike is running");
```

```
public static void main (String args[])
```

```
{
```

```
    Bike b = new Bike();
```

```
}
```

```
}
```

Output - Bike is running.

② Example (2) [Parameterized Constructors]

A Java constructor can also accept one or more parameters. Such constructors are known as parameterized constructors.



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Example

===

```
class Student
```

```
{
```

```
    int id;
```

```
    String name;
```

```
    Student(int i, String n)
```

```
    {
```

```
        id = i;
```

```
        name = n;
```

```
    }
```

```
    void display()
```

```
    {
```

```
        System.out.println(id + " " + name);
```

```
    }
```

```
public static void main (String args[])
```

```
{
```

```
    Student s = new Student(1, "abc");
```

```
    s.display();
```

```
}
```

```
}
```

Output:- 1 abc



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* Constructor Overloading

It is a technique of having more than one constructors with different parameter list.

Example:-

```
class Student
{
    int id;
    String name;
```

```
    Student (int i)
```

```
    {
```

```
        id = i;
```

```
    }
```

```
    Student (int i, String n)
```

```
    {
```

```
        id = i;
```

```
        name = n;
```

```
    }
```

```
    void display ()
```

```
    {
```

```
        System.out.println (id + " " + name);
```

```
    }
```



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```
public static void main (String args [])
```

```
{  
    Student s1 = new Student (1);
```

```
    Student s2 = new Student (2, "xyz");
```

```
    s1.display();
```

```
    s2.display();
```

```
}  
}
```

Output :- 1

2 xyz

