

Java Tutorials

Class- 2

Constructors in Java

Constructors

In Java, a constructor is a block of codes similar to the method. It is called when an instance of the class is created. At the time of calling constructor, memory for the object is allocated in the memory.

It is a special type of method which is used to initialize the object.

Every time an object is created using the `new()` keyword, at least one constructor is called.

Constructors

It calls a default constructor if there is no constructor available in the class. In such case, Java compiler provides a default constructor by default.

There are two types of constructors in Java: no-arg constructor, and parameterized constructor.

Note: It is called constructor because it constructs the values at the time of object creation. It is not necessary to write a constructor for a class. It is because java compiler creates a default constructor if your class doesn't have any.

Constructors

Rules for creating Java constructor

There are two rules defined for the constructor:

- Constructor name must be the same as its class name
- A Constructor must have no explicit return type
- A Java constructor cannot be abstract, static, final, and synchronized

Types of Java constructors

Two types of constructors in Java:

- Default constructor (no-arg constructor)
- Parameterized constructor

Java Default Constructor

A constructor is called "Default Constructor" when it doesn't have any parameter.

Syntax of default constructor:

```
<class_name>(){}
```

Q) What is the purpose of a default constructor?

The default constructor is used to provide the default values to the object like 0, null, etc., depending on the type.

Example of default constructor

```
//Java Program to create and call a default constructor
```

```
class Car{
```

```
//creating a default constructor
```

```
Car(){System.out.println("Bike is created");}
```

```
//main method
```

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

```
//calling a default constructor
```

```
Car c=new Car();
```

```
}
```

```
}
```



- More about Constructor in Java