

In Java, a **constructor** is a special method used to initialize an object. It has the **same name as the class** and **does not have a return type** (not even void).

Here are some common examples:

1. Default Constructor

```
class Student {  
    Student() {  
        System.out.println("Student object created");  
    }  
  
    public static void main(String[] args) {  
        Student s1 = new Student();  
    }  
}
```

Output:

Student object created

2. Parameterized Constructor

```
class Student {  
    String name;  
    int age;  
  
    Student(String n, int a) {  
        name = n;  
        age = a;  
    }  
  
    void display() {  
        System.out.println(name + " " + age);  
    }  
  
    public static void main(String[] args) {  
        Student s1 = new Student("Alice", 20);  
        s1.display();  
    }  
}
```

Output:

Alice 20

3. Constructor Overloading

A class can have multiple constructors with different parameter lists.

```
class Rectangle {  
    int length, width;  
  
    Rectangle() {  
        length = 1;  
        width = 1;  
    }  
  
    Rectangle(int l, int w) {  
        length = l;  
        width = w;  
    }  
  
    void display() {  
        System.out.println("Length: " + length + ", Width: " + width);  
    }  
  
    public static void main(String[] args) {  
        Rectangle r1 = new Rectangle();  
        Rectangle r2 = new Rectangle(10, 5);  
  
        r1.display();  
        r2.display();  
    }  
}
```

Output:

Length: 1, Width: 1
Length: 10, Width: 5