4.Writing a program in Java to verify the implementations of constructor types

public class ConstructorDemo {

// Default constructor

public ConstructorDemo() {

System.out.println("Default constructor called");

}

// Parameterized constructor

public ConstructorDemo(String name, int age) {

System.out.println("Parameterized constructor called");

System.out.println("Name: " + name);

System.out.println("Age: " + age);

}

// Copy constructor

public ConstructorDemo(ConstructorDemo other) {

System.out.println("Copy constructor called");

System.out.println("Name: " + other.name);

System.out.println("Age: " + other.age);

}

private String name;

private int age;

public static void main(String[] args) {

// Create object using default constructor

ConstructorDemo obj1 = new ConstructorDemo();

// Create object using parameterized constructor

ConstructorDemo obj2 = new ConstructorDemo("John", 30);

// Create object using copy constructor

ConstructorDemo obj3 = new ConstructorDemo(obj2);

}

OUTPUT:

Default constructor called

Parameterized constructor calledName: John

Age: 30

Copy constructor calledName: null

Age: 0}