

**Object Oriented Programming Using - JAVA**

**PRACTICAL - 8**

**Aim:** Write a program in Java to develop Copy and Parameterized constructor

**Theory:** In this practical, we learn how to implement both **parameterized** and **copy constructors** in Java. A parameterized constructor allows us to initialize object attributes with specific values at the time of creation. A copy constructor creates a new object by copying the values from an existing object. These constructors help demonstrate object instantiation, data encapsulation, and constructor overloading. Using the JDK, we write, compile (javac) and run (java) the program to observe how constructors work in real-time.

**Code:**

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

    Student(String name, int Enroll_no)
    {
        this.name = name;
        this.Enroll_no = Enroll_no;
    }
    Student(Student s2)
    {
        this.name = s2.name;
        this.Enroll_no = s2.Enroll_no;
    }

    public static void main(String args[])
    {
        System.out.println("First Object:");
        Student s1 = new Student("Joy",123);
        System.out.println("Name= " + s1.name + ", Enroll_no= "+ s1.Enroll_no);

        System.out.println("Second Object:");
        Student s2 = new Student(s1);
        System.out.println("Name= "+ s2.name + ", Enroll_no= "+ s2.Enroll_no);
    }
}
```

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**Output:**

```
First Object:  
Name= Joy, Enroll_no= 123  
Second Object:  
Name= Joy, Enroll_no= 123
```

**Conclusion:** This practical helped us understand how parameterized and copy constructors are used to initialize and duplicate objects in Java, reinforcing key object-oriented programming concepts.