4. Program for Bitwise Operators

Objective: Learning Bitwise Operators

Description and Code: Create a java file and save it as Program4.java and put following code into this file: -

```
//Bitwise Operators

public class Program4 {

   public static void main(String[] args) {

  //      Bitwise AND (&)

          int x = 4, y = 5;     //

System.out.println("x & y = " + (x & y));

System.out.println("-----------------------------------");

//          Bitwise inclusive OR (|)
```

```
System.out.println("x | y = " + (x | y));   // 100 | 101



System.out.println("-----------------------------------");

// Bitwise exclusive OR (^) =  XOR

System.out.println("x ^ y = " + (x ^ y));

System.out.println("-----------------------------------");

// Bitwise Complement (~)
int c=5;
System.out.println("~c = " + (~c));

System.out.println("-----------------------------------");

//Bitwise Right Shift Operator     >>

int z = 25;
System.out.println("Bitwise Right Shift Operator   z>>3 = " + (z>>3));
```

```
System.out.println("-----------------------------------");

//Bitwise Left Shift Operator  <<

z = 10;
System.out.println("Bitwise Left Shift Operator  z<<3 = " + (z << 3));

    }
}
```

Expected Output:

```
x & y = 4
-----------------------------------
x | y = 5
-----------------------------------
x ^ y = 1
-----------------------------------
~c = -6
-----------------------------------
Bitwise Right Shift Operator   z>>3 = 3
```

Bitwise Left Shift Operator z<<3 = 80