LAB 2

Assignment-1.

Write a Java program that uses a method to calculate the area of a rectangle and compare them using Relational Operator Steps:

• **Create a class Rectangle.**

• **The Rectangle class should have two attributes length and width of type int.**

• **Create a constructor that accepts length and width as parameters.**

• **Area should be calculated as length*area.**

• **Instantiate two Rectangle classes with random values.**

• **Compare the areas of the two rectangles using the Relational Operator.**

• **If the first one is bigger than the second one, print "Rectangle1 > Rectangle2".**

• **If the first one is smaller print "Rectangle1 < Rectangle2".**

• **Otherwise print "They are equal".**

```java
package lab2;
 //Create a class Rectangle.
public class Rectangle {
    // declaring attributes of type integer
    int length;
    int width;
 public static void main(String[] args) {
        // creating a object for class Rectangle of reference R1
        Rectangle R1 = new Rectangle();
        R1.length = 4; // initiating random values
        R1.width = 3;
        // formula for calculating the area of Rectangle
        int area1 = R1.length *R1.width;

        // creating a object for class Rectangle of reference R2

         Rectangle R2 = new Rectangle();
         R2.length = 3;
         R2.width = 4;
         int area2 = R2.length*R2.width;
         //comparing the area of R1 and R2
         if(area1>area2)
         {
             System.out.println("Rectangle1>Rectangle2");

         }
         else if (area1<area2)
         {
             System.out.println("Rectangle1<Rectangle2");
         }
         else
         {
             System.out.println("Rectangle1=Rectangle2");
         }
    }

}
```

OUTPUT

Rectangle1=Rectangle2