

# ASSIGNMENT :- 1

```
Main.java ×
1  package Naveen;
2
3  class Rectangle {
4      private int length;
5      private int width;
6
7      // Constructor
8  public Rectangle(int length, int width) {
9      this.length = length;
10     this.width = width;
11 }
12
13 // Method to calculate area
14 public int calculateArea() {
15     return length * width;
16 }
17 }
18
19 public class Main {
20 public static void main(String[] args) {
21     // Instantiate two rectangles with random values
22     Rectangle rect1 = new Rectangle(10, 5); // Area = 50
23     Rectangle rect2 = new Rectangle(8, 6);  // Area = 48
24
25     int area1 = rect1.calculateArea();
26     int area2 = rect2.calculateArea();
27
28     // Compare areas using relational operators
29     if (area1 > area2) {
30         System.out.println("Rectangle1 > Rectangle2");
31     } else if (area1 < area2) {
32         System.out.println("Rectangle1 < Rectangle2");
33     } else {
34         System.out.println("They are equal");
35     }
36 }
37 }
38
```

Output :-

```
Problems Javadoc Declaration Console ×
<terminated> Main (1) [Java Application] C:\Users\Naveen\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86
Rectangle1 > Rectangle2
```

# Input :-

```
class Rectangle {  
    private int length;  
  
    private int width;  
  
    // Constructor  
  
    public Rectangle(int length, int width) {  
  
        this.length = length;  
  
        this.width = width;  
  
    }  
  
    // Method to calculate area  
  
    public int calculateArea() {  
  
        return length * width;  
  
    }  
}  
  
public class Main {  
  
    public static void main(String[] args) {  
  
        // Instantiate two rectangles with random values  
  
        Rectangle rect1 = new Rectangle(10, 5); // Area = 50  
  
        Rectangle rect2 = new Rectangle(8, 6);  // Area = 48  
  
  
  
        int area1 = rect1.calculateArea();  
  
        int area2 = rect2.calculateArea();  
  
  
  
        // Compare areas using relational operators  
  
        if (area1 > area2) {  
  
            System.out.println("Rectangle1 > Rectangle2");  
  
        } else if (area1 < area2) {  
  
            System.out.println("Rectangle1 < Rectangle2");  
  
        } else {  
  
            System.out.println("They are equal");  
  
        }  
  
    }  
}
```