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**ROLL NO:24**

**BATCH : B2**

**COURSE: OOPs PRACTICAL**

**Assginment No. 5**

**Problem Statment:** Write a program in Java with class Rectangle with the data fields width, length, area and colour. The length, width and area are of double type and colour is of string type. The methods are get\_length(), get\_width(), get\_colour() and find\_area(). Create two objects of Rectangle and compare their area and colour. If the area and colour both are the same for the objects then display “Matching Rectangles”, otherwise display “Non-matching Rectangle”.

1. class Rectangle
2. {
3. private double width;
4. private double length;
5. private double area;
6. private String colour;
8. public Rectangle(double width, double length, String colour)
9. {
10. this.width = width;
11. this.length = length;
12. this.colour = colour;
13. this.area = width \* length;
14. }
15. public double getLength()
16. {
17. return length;
18. }
19. public double getWidth()
20. {
21. return width;
22. }
23. public String getColour()
24. {
25. return colour;
26. }
27. public double findArea()
28. {
29. return area;
30. }
31. public boolean isEqual(Rectangle obj)
32. {
33. return this.findArea() == obj.findArea() && this.getColour().equals(other.getColour());
34. }
35. }
36. public class assignment5
37. {
38. public static void main(String[] args)
39. {
41. Rectangle rect1 = new Rectangle(5.0, 10.0, "Blue");
42. Rectangle rect2 = new Rectangle(5.0, 10.0, "Blue");
43. // Comparing rectangles
44. if (rect1.isEqual(rect2))
45. {
46. System.out.println("Matching Rectangles");
47. }
48. else
49. {
50. System.out.println("Non-matching Rectangle");
51. }
52. }
53. }

**OUTPUT:**

Matching Rectangles