```
 1  /****
 2   *
 3   * A simple Java program that defines a rectangle data structure and two methods
 4   * that operate on rectangles.
 5   *
 6   */
 7
 8  public class Rectangle {
 9      int x;
10      int y;
11      int width;
12      int height;
13
14      Rectangle(int x, int y, int width, int height) {
15          this.x = x;
16          this.y = y;
17          this.width = width;
18          this.height = height;
19      }
20
21      void move(int x_increment, int y_increment) {
22          x = x + x_increment;
23          y = y + y_increment;
24      }
25
26      boolean equals(Rectangle r) {
27          return x == r.x &&
28                 y == r.y &&
29                 width == r.width &&
30                 height == r.height;
31      }
32
33      public static void main(String[] args) {
34          Rectangle r1 = new Rectangle(10, 20, 100, 200);
35          Rectangle r2 = new Rectangle(20, 30, 100, 200);
36          boolean eq;
37
38          eq = r1.equals(r2);
39          if (eq == false) {
40              System.out.println("r1 not = r2");
41          }
42          else {
43              System.out.println("r1 = r2");
44          }
45
46          r1.move(10, 10);
47          eq = r1.equals(r2);
48          if (eq == false) {
49              System.out.println("r1 not = r2");
50          }
51          else {
52              System.out.println("r1 = r2");
53          }
54      }
55
56  }
```