

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

Solution 2

Solution 3

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 import java.util.*;
4
5 class Program {
6     static String UP = "up";
7     static String RIGHT = "right";
8     static String DOWN = "down";
9     static String LEFT = "left";
10
11 // O(n^2) time | O(n^2) space - where n is the number of coordinates
12 public static int rectangleMania(Point[] coords) {
13     Map<String, Map<String, List<Point>>>> coordsTable = getCoordsTable(coords);
14     return getRectangleCount(coords, coordsTable);
15 }
16
17 public static Map<String, Map<String, List<Point>>>> getCoordsTable(Point[] coords) {
18     Map<String, Map<String, List<Point>>>> coordsTable =
19         new HashMap<String, Map<String, List<Point>>>>();
20     for (Point coord1 : coords) {
21         Map<String, List<Point>>> coord1Directions = new HashMap<String, List<Point>>>();
22         coord1Directions.put(UP, new ArrayList<Point>());
23         coord1Directions.put(RIGHT, new ArrayList<Point>());
24         coord1Directions.put(DOWN, new ArrayList<Point>());
25         coord1Directions.put(LEFT, new ArrayList<Point>());
26         for (Point coord2 : coords) {
27             String coord2Direction = getCoordDirection(coord1, coord2);
28             if (coord1Directions.containsKey(coord2Direction))
29                 coord1Directions.get(coord2Direction).add(coord2);
30         }
31         String coord1String = coordToString(coord1);
32         coordsTable.put(coord1String, coord1Directions);
33     }
34 }
```

Solution 1

Solution 2

Solution 3

```
1 class Program {
2     public static int rectangleMania(Point[] coords) {
3         // Write your code here.
4         return -1;
5     }
6
7     static class Point {
8         public int x;
9         public int y;
10
11     public Point(int x, int y) {
12         this.x = x;
13         this.y = y;
14     }
15 }
16 }
17 }
```

Our Tests

Custom Output

Submit Code

1 class Program {

2 public static int rectangleMania(Point[] coords) {

3 // Write your code here.

4 return -1;

5 }

6

7 static class Point {

8 public int x;

9 public int y;

10

11 public Point(int x, int y) {

12 this.x = x;

13 this.y = y;

14 }

15 }

16 }

17 }

Run or submit code when you're ready.