Our Solution(s) Run Code

Solution 1 Solution 2 Solution 3

```
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using System;
using System.Collections.Generic;

public class Program {
  // O(n^2) time | O(n) space - where n is the number of coordinates
  public static int RectangleMania(Point[] coords) {
    HashSet<string> coordsTable = getCoordsTable(coords);
    return getRectangleCount(coords, coordsTable);
  }

  public static HashSet<string> getCoordsTable(Point[] coords) {
    HashSet<string> coordsTable = new HashSet<string>();
    foreach (Point coord in coords) {
      string coordstring = coordTostring(coord);
      coordsTable.Add(coordstring);
    }
    return coordsTable;
  }

  public static int getRectangleCount(Point[] coords, HashSet<string>
    int rectangleCount = 0;
    foreach (Point coord1 in coords) {
      foreach (Point coord2 in coords) {
        if (!isInUpperRight(coord1, coord2)) continue;
        string upperCoordstring = coordTostring(new Point(coord1.x,
            coord2.y));
        string rightCoordstring = coordTostring(new Point(coord2.x,
            coord1.y));
        if (
          coordsTable.Contains(upperCoordstring) &&
          coordsTable.Contains(rightCoordstring)
```

Your Solutions Run Code

Solution 1 Solution 2 Solution 3

```
public class Program {
  public static int RectangleMania(Point[] coords) {
    // Write your code here.
    return -1;
  }

  public class Point {
    public int x;
    public int y;

    public Point(int x, int y) {
      this.x = x;
      this.y = y;
    }
  }
}

```

Our Tests

Custom Output Submit Code

```
        new Program.Point(3, 8)
      };
      Utils.AssertTrue(Program.RectangleMatrix(coords) == 1);
    }

    [Test]
    public void TestCase2() {
      Program.Point[] coords = new Program.Point[] {
        new Program.Point(0, 0),
        new Program.Point(0, 1),
        new Program.Point(1, 1),
        new Program.Point(1, 0),
        new Program.Point(2, 1),
        new Program.Point(2, 0)
      };
```

Run or submit code when you're ready.