Solution 1 Solution 2 Solution 3

Our Solution(s)

Run Code

Your Solutions

Run Code

```
Solution 1 Solution 2
                           Solution 3
 1 # Copyright © 2020 AlgoExpert, LLC. All rights reserved.
   \# O(n^2) time | O(n) space - where n is the number of coordinates
   def rectangleMania(coords):
        coordsTable = getCoordsTable(coords)
        return getRectangleCount(coords, coordsTable)
9
   def getCoordsTable(coords):
        coordsTable = {"x": {}, "y": {}}
10
11
        for coord in coords:
12
            x, y = coord
            if x not in coordsTable["x"]:
14
               coordsTable["x"][x] = []
            coordsTable["x"][x].append(coord)
            if y not in coordsTable["y"]:
16
               coordsTable["y"][y] = []
17
            coordsTable["y"][y].append(coord)
18
19
        return coordsTable
20
21
22
   def getRectangleCount(coords, coordsTable):
23
        rectangleCount = 0
24
        for coord in coords:
25
           lowerLeftY = coord[1]
26
            rectangleCount += clockwiseCountRectangles(coord, coordsTable,
27
        return rectangleCount
28
29
{\tt 30} \quad \textbf{def clockwiseCountRectangles} ({\tt coord1}, \ {\tt coordsTable}, \ {\tt direction}, \ {\tt lowerLeft}
31
        x1, y1 = coord1
```

```
def rectangleMania(coords):
    # Write your code here.
pass
4
```

W 100, 100, 2 mm

32

33

if direction == DOWN:

relevantCoords = coordsTable["x"][x1]

Run or submit code when you're ready.