1828. Queries on Number of Points Inside a Circle

Solved

Medium \times Topics \textbf{1} Companies \times Hint

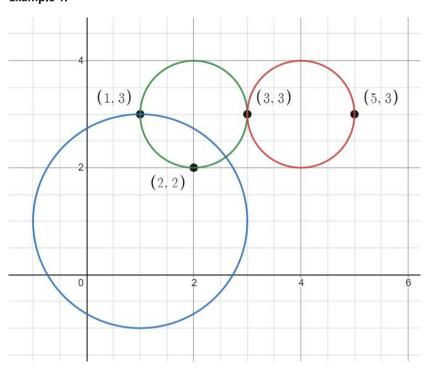
You are given an array points where points[i] = [x_i , y_i] is the coordinates of the ith point on a 2D plane. Multiple points can have the **same** coordinates.

You are also given an array queries where queries[j] = $[x_j, y_j, r_i]$ describes a circle centered at (x_j, y_j) with a radius of r_j .

For each query queries[j], compute the number of points **inside** the jth circle. Points **on the border** of the circle are considered **inside**.

Return an array answer, where answer[j] is the answer to the jth query.

Example 1:



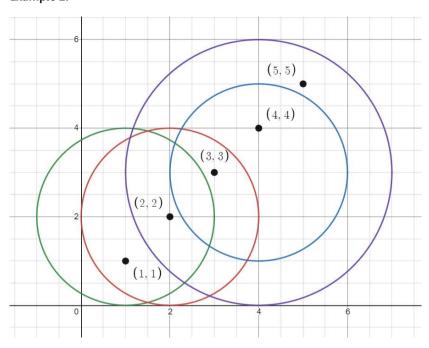
Input: points = [[1,3],[3,3],[5,3],[2,2]], queries = [[2,3,1],[4,3,1],[1,1,2]]

Output: [3,2,2]

Explanation: The points and circles are shown above.

queries[0] is the green circle, queries[1] is the red circle, and queries[2] is the blue circle.

Example 2:



Input: points = [[1,1],[2,2],[3,3],[4,4],[5,5]], queries = [[1,2,2],[2,2,2],[4,3,2],[4,3,3]]

Output: [2,3,2,4]

Explanation: The points and circles are shown above.

queries[0] is green, queries[1] is red, queries[2] is blue, and queries[3] is purple.

Constraints:

- 1 <= points.length <= 500
- points[i].length == 2
- $0 <= x_i, y_i <= 500$
- 1 <= queries.length <= 500
- queries[j].length == 3
- $0 <= x_j, y_j <= 500$
- 1 <= r_j <= 500
- All coordinates are integers.

Follow up: Could you find the answer for each query in better complexity than O(n)?

Seen this question in a real interview before? 1/5

Yes No

Accepted 75.7K Submissions 87.8K Acceptance Rate 86.2%

Topics

Companies

Hint 1

Hint 2

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