973. K Closest Points to Origin

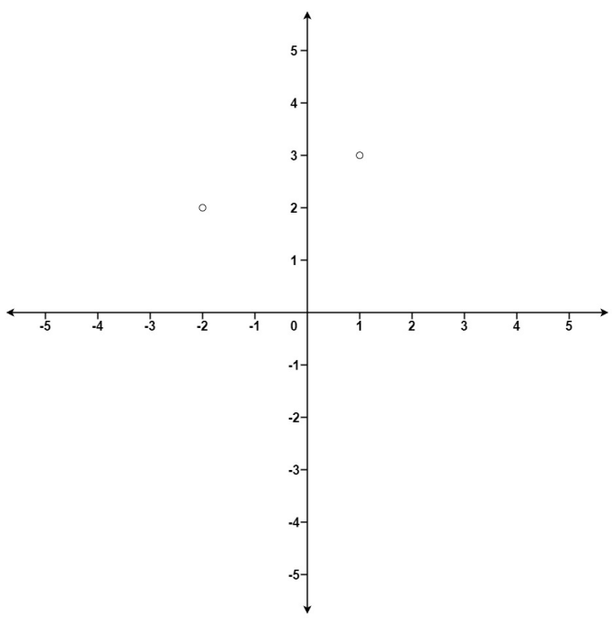
Medium Topics Companies

Given an array of `points` where `points[i] = [x_i, y_i]` represents a point on the **X-Y** plane and an integer `k`, return the `k` closest points

The distance between two points on the **X-Y** plane is the Euclidean distance (i.e., $\sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$).

You may return the answer in **any order**. The answer is **guaranteed** to be **unique** (except for the order that it is in).

Example 1:




```
Input: points = [[1,3],[-2,2]], k = 1
Output: [[-2,2]]
Explanation:
The distance between (1, 3) and the origin is sqrt(10).
The distance between (-2, 2) and the origin is sqrt(8).
Since sqrt(8) < sqrt(10), (-2, 2) is closer to the origin.
We only want the closest k = 1 points from the origin, so the answer is just [[-2,2]].
```

Example 2:

```
Input: points = [[3,3],[5,-1],[-2,4]], k = 2
Output: [[3,3],[-2,4]]
Explanation: The answer [[-2,4],[3,3]] would also be accepted.
```

Constraints:

- $1 <= k <= points.length <= 10^4$
- $-10^4 <= x_i, y_i <= 10^4$

Seen this question in a real interview before? 1/4

Yes No

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