1266. Minimum Time Visiting All Points

Solved ●

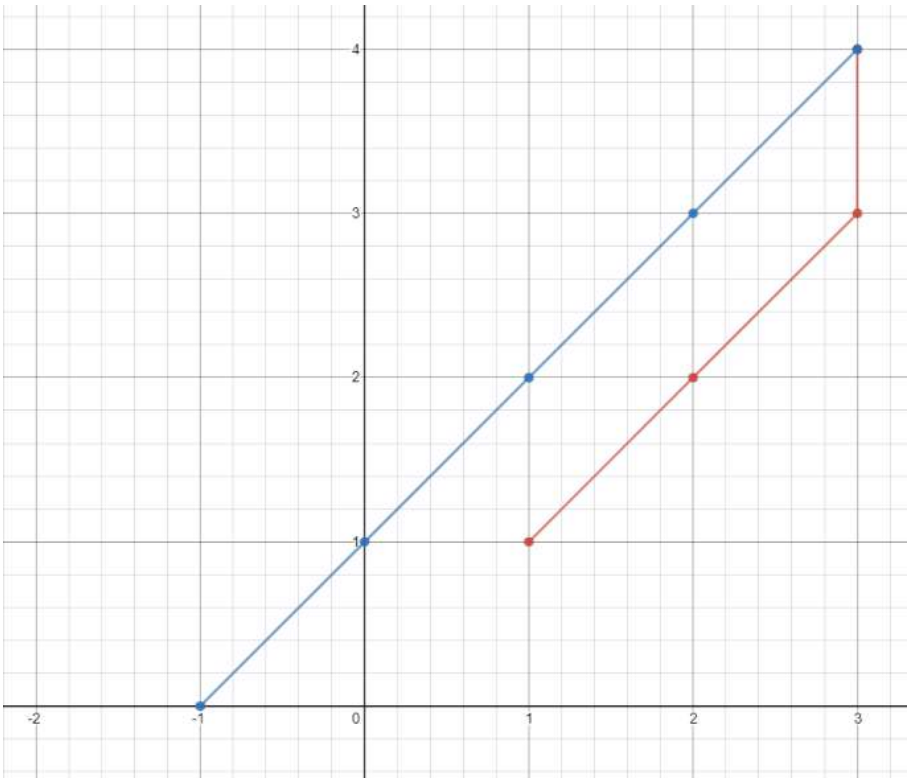
Easy Topics Companies Hint

On a 2D plane, there are `n` points with integer coordinates `points[i] = [$x_i$, $y_i$]`. Return *the **minimum time** in seconds to visit all the points in the order given by* `points`.

You can move according to these rules:

- In `1` second, you can either:
  - move vertically by one unit,
  - move horizontally by one unit, or
  - move diagonally `sqrt(2)` units (in other words, move one unit vertically then one unit horizontally in `1` second).
- You have to visit the points in the same order as they appear in the array.
- You are allowed to pass through points that appear later in the order, but these do not count as visits.

Example 1:



> **Input:** points = [[1,1],[3,4],[-1,0]]
> **Output:** 7
> **Explanation:** One optimal path is **[1,1]** -> [2,2] -> [3,3] -> **[3,4]** -> [2,3] -> [1,2] -> [0,1] -> **[-1,0]**
> Time from [1,1] to [3,4] = 3 seconds
> Time from [3,4] to [-1,0] = 4 seconds
> Total time = 7 seconds

Example 2:

> **Input:** points = [[3,2],[-2,2]]
> **Output:** 5

Constraints:

- `points.length == n`
- `1 <= n <= 100`
- `points[i].length == 2`
- `-1000 <= points[i][0], points[i][1] <= 1000`

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

Yes No

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Topics

Companies

Hint 1

Hint 2

Hint 3

Discussion (46)