# 1266. Minimum Time Visiting All Points

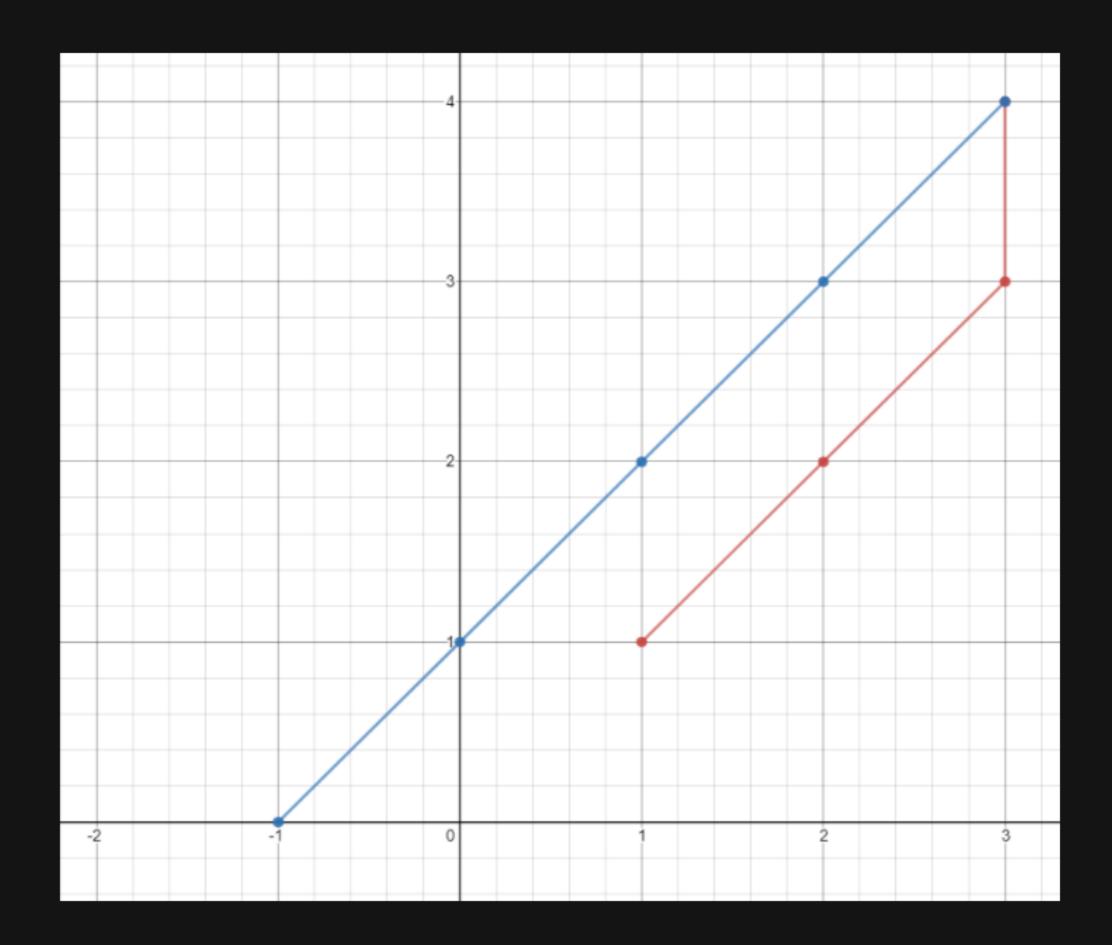
# Description

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
  - o 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