

LeetCode

Explore

Problems

Interview

Contest

Discuss

Store

Black Friday Sale

🔔

🔥 0

👤

Description

Solution

Discuss (999+)

Submissions

i

Java

Autocomplete

i

{ }

↶

⚙

🔄

947. Most Stones Removed with Same Row or Column

Medium

👍 4307

👤 591

👤 Add to List

🔗 Share

On a 2D plane, we place  $n$  stones at some integer coordinate points. Each coordinate point may have at most one stone.

A stone can be removed if it shares either **the same row or the same column** as another stone that has not been removed.

Given an array `stones` of length  $n$  where `stones[i] = [xi, yi]` represents the location of the  $i^{\text{th}}$  stone, return *the largest possible number of stones that can be removed*.

Example 1:

Input: `stones = [[0,0],[0,1],[1,0],[1,2],[2,1],[2,2]]`

Output: 5

Explanation: One way to remove 5 stones is as follows:  
1. Remove stone [2,2] because it shares the same row as [2,1].  
2. Remove stone [2,1] because it shares the same column as [0,1].  
3. Remove stone [1,2] because it shares the same row as [1,0].  
4. Remove stone [1,0] because it shares the same column as [0,0].  
5. Remove stone [0,1] because it shares the same row as [0,0].  
Stone [0,0] cannot be removed since it does not share a row/column with another stone still on the plane.

Example 2:

Input: `stones = [[0,0],[0,2],[1,1],[2,0],[2,2]]`

Output: 3

Explanation: One way to make 3 moves is as follows:  
1. Remove stone [2,2] because it shares the same row as [2,0].  
2. Remove stone [2,0] because it shares the same column as [0,0].  
3. Remove stone [0,2] because it shares the same row as [0,0].  
Stones [0,0] and [1,1] cannot be removed since they do not share a row/column with another stone still on the plane.

Example 3:

Input: `stones = [[0,0]]`

Output: 0

Explanation: [0,0] is the only stone on the plane, so you cannot remove it.

Constraints:

- $1 \leq \text{stones.length} \leq 1000$
- $0 \leq x_i, y_i \leq 10^4$
- No two stones are at the same coordinate point.

Accepted 162,420

Submissions 276,115

Seen this question in a real interview before?

Yes

No

Companies

🔒

i

⌵

Related Topics

⌵

1

2

3

4

5

class Solution {

public int removeStones(int[][] stones) {

}

}

⌵ Problems

🔗 Pick One

⏪ Prev

947/2480

Next ⏩

Console ⌵

Contribute i

▶ Run Code ⌵

Submit

https://leetcode.com/problems/most-stones-removed-with-same-row-or-column/

1/1