

Description

Solution

Discuss (999+)

Submissions

54. Spiral Matrix

Medium2853601Add to ListShare

Given a matrix of $m \times n$ elements (m rows, n columns), return all elements of the matrix in spiral order.

Example 1:

Input:

```
[
  [ 1, 2, 3 ],
  [ 4, 5, 6 ],
  [ 7, 8, 9 ]
]
```

Output: [1,2,3,6,9,8,7,4,5]

Example 2:

Input:

```
[
  [1, 2, 3, 4],
  [5, 6, 7, 8],
  [9,10,11,12]
]
```

Output: [1,2,3,4,8,12,11,10,9,5,6,7]

Accepted 408,396 | Submissions 1,182,842

Seen this question in a real interview before?

YesNo

Companies

JavaAutocomplete

```
1 class Solution {
2     private int[][] dice = { { 0, 1 }, { 1, 0 }, { 0, -1 }, { -1, 0 } };
3     private int direction = 0;
4     private List<Integer> result = new ArrayList<Integer>();
5
6     public List<Integer> spiralOrder(int[][] matrix) {
7         if(matrix.length == 0) return result;
8         boolean[][] visited = new boolean[matrix.length][matrix[0].length];
9         int[] initPos = { 0, 0 };
10        result.add(matrix[0][0]);
11        visited[0][0] = true;
12        for (int i = 1; i < matrix.length * matrix[0].length; i++) {
13            initPos = findNextPlace(initPos, matrix, visited);
14        }
15
16        return result;
17    }
18
19    private int[] findNextPlace(int[] initPos, int[][] matrix, boolean[][] visited) {
20
21        int[] nextDir = dice[direction];
22        int x = initPos[0] + nextDir[0];
23        int y = initPos[1] + nextDir[1];
24
25        if (x < 0 || y < 0 || x >= matrix.length || y >= matrix[0].length || visited[x]
```

Testcase

Run Code Result

Debugger

Accepted

Runtime: 0 ms

Your input

[[1,2,3],[4,5,6],[7,8,9]]

Output

[1,2,3,6,9,8,7,4,5]

Diff

Expected

[1,2,3,6,9,8,7,4,5]