AlgoExpert Quad Layout Go 12px Sublime Monokai 00:00:00

Prompt Scratchpad Our Solution(s) Video Explanation Run Code

Solution 1

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```
_{\rm 1} // Copyright @ 2020 AlgoExpert, LLC. All rights reserved.
   package main
 5 // O(n) time | O(n) space - where n is the total number of elements in the two-dimensional array
 6 func ZigzagTraverse(array [][]int) []int {
    if len(array) == 0 {
       return []int{}
9
10
     height := len(array) - 1
11
     width := len(array[0]) - 1
12
13
     14
      row := 0
15
16
      goingDown := true
17
       \begin{tabular}{ll} for ! isOutOfBounds(row, col, height, width) { } \\ \end{tabular} 
18
       result = append(result, array[row][col])
19
       if goingDown {
20
         if col == 0 || row == height {
21
           goingDown = false
           if row == height {
22
23
             col++
24
           } else {
25
             row++
26
27
          } else {
28
           row++
29
           col--
30
31
        } else {
         if row == 0 \mid \mid col == width {}
32
33
           goingDown = true
            if col == width {
34
35
             row++
36
           } else {
37
             col++
38
39
          } else {
40
           row--
41
           col++
42
43
44
45
     return result
46 }
47
48 func isOutOfBounds(row, col, height, width int) bool {
49
    return row < 0 || row > height || col < 0 || col > width
50 }
```