

PromptScratchpadOur Solution(s)Video Explanation

Run Code

Solution 1

```
1 # Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 # O(n) time | O(n) space - where n is the total number of elements in the two-dimensional array
4 def zigzagTraverse(array):
5     height = len(array) - 1
6     width = len(array[0]) - 1
7     result = []
8     row, col = 0, 0
9     goingDown = True
10    while not isOutOfBounds(row, col, height, width):
11        result.append(array[row][col])
12        if goingDown:
13            if col == 0 or row == height:
14                goingDown = False
15                if row == height:
16                    col += 1
17            else:
18                row += 1
19        else:
20            row += 1
21            col -= 1
22    else:
23        if row == 0 or col == width:
24            goingDown = True
25            if col == width:
26                row += 1
27            else:
28                col += 1
29        else:
30            row -= 1
31            col += 1
32    return result
33
34
35 def isOutOfBounds(row, col, height, width):
36     return row < 0 or row > height or col < 0 or col > width
37
```