

Our Solution(s)Run Code

Solution 1Solution 2

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 class Program {
4     // O(n) time | O(n) space - where n is the total number of elements in the array
5     func spiralTraverse(array: [[Int]]) -> [Int] {
6         var result = [Int]()
7         spiralFill(array, 0, array.count - 1, 0, array[0].count - 1, &result)
8         return result
9     }
10
11     func spiralFill(_ array: [[Int]], _ startRow: Int, _ endRow: Int, _ startCol: Int, _ endCol: Int, _ result: inout [Int]) {
12         if startRow > endRow || startCol > endCol {
13             return
14         }
15
16         for col in stride(from: startCol, through: endCol, by: 1) {
17             result.append(array[startRow][col])
18         }
19
20         for row in stride(from: startRow + 1, through: endRow, by: 1) {
21             result.append(array[row][endCol])
22         }
23
24         for col in stride(from: endCol - 1, through: startCol, by: -1) {
25             if startRow == endRow {
26                 break
27             }
28             result.append(array[endRow][col])
29         }
30
31         for row in stride(from: endRow - 1, through: startRow + 1, by: -1) {
32             if startCol == endCol {
33                 break
34             }
35             result.append(array[row][startCol])
36         }
37     }
38 }
```

Your SolutionsRun Code

Solution 1Solution 2Solution 3

```
1 class Program {
2     func spiralTraverse(array: [[Int]]) -> [Int] {
3         // Write your code here.
4         return []
5     }
6 }
7
```

```

1 def test1():
2     program = Program()
3     method("Test case 1")
4     input = [1]
5     expected = [1]
6     output = program.execute(input)
7     assertEquals(expected, output)
8
9     method("Test case 2")
10    input = [1, 2, 3, 4, 5]
11    expected = [1, 2, 3, 4, 5]
12    output = program.execute(input)
13    assertEquals(expected, output)
14
15    method("Test case 3")
16    input = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
17    expected = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
18    output = program.execute(input)
19    assertEquals(expected, output)

```

Run or submit code when you're ready.