

Our Solution(s)Run Code

Solution 1Solution 2

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 import java.util.*;
4
5 class Program {
6     // O(n) time | O(n) space - where n is the total number of elements
7     public static List<Integer> spiralTraverse(int[][] array) {
8         if (array.length == 0) return new ArrayList<Integer>();
9
10        var result = new ArrayList<Integer>();
11        var startRow = 0;
12        var endRow = array.length - 1;
13        var startCol = 0;
14        var endCol = array[0].length - 1;
15
16        while (startRow <= endRow && startCol <= endCol) {
17            for (int col = startCol; col <= endCol; col++) {
18                result.add(array[startRow][col]);
19            }
20
21            for (int row = startRow + 1; row <= endRow; row++) {
22                result.add(array[row][endCol]);
23            }
24
25            for (int col = endCol - 1; col >= startCol; col--) {
26                if (startRow == endRow) break;
27                result.add(array[endRow][col]);
28            }
29
30            for (int row = endRow - 1; row > startRow; row--) {
31                if (startCol == endCol) break;
32                result.add(array[row][startCol]);
33            }
```

Your SolutionsRun Code

Solution 1Solution 2Solution 3

```
1 import java.util.*;
2
3 class Program {
4     public static List<Integer> spiralTraverse(int[][] array) {
5         // Write your code here.
6         return new ArrayList<Integer>();
7     }
8 }
9
```

```

1 class ProgramTest {
2     static
3     public static void Main() {
4         int input =
5             int.Parse(Console.ReadLine());
6         int[]
7             arr = new int[input];
8         for (int i = 0; i < arr.Length; i++)
9             arr[i] = int.Parse(Console.ReadLine());
10        int expected = arr.Sum();
11        int actual = Program.Sum(arr);
12        Console.WriteLine(expected == actual);
13    }
14 }
15
16 static
17 public static int Sum(int[] arr) {
18     int sum = 0;
19     for (int i = 0; i < arr.Length; i++)
20         sum += arr[i];
21     return sum;
22 }

```

Run or submit code when you're ready.