Prompt   Scratchpad   Our Solution(s)   Video Explanation   Run Code

Solution 1

```go
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package main

// O(n) time | O(n) space - where n is the total number of elements in the two-dimensional array
func ZigzagTraverse(array [][]int) []int {
  if len(array) == 0 {
    return []int{}
  }

  height := len(array) - 1
  width := len(array[0]) - 1
  result := []int{}
  row := 0
  col := 0
  goingDown := true
  for !isOutOfBounds(row, col, height, width) {
    result = append(result, array[row][col])
    if goingDown {
      if col == 0 || row == height {
        goingDown = false
        if row == height {
          col++
        } else {
          row++
        }
      } else {
        row++
        col--
      }
    } else {
      if row == 0 || col == width {
        goingDown = true
        if col == width {
          row++
        } else {
          col++
        }
      } else {
        row--
        col++
      }
    }
  }
  return result
}

func isOutOfBounds(row, col, height, width int) bool {
  return row < 0 || row > height || col < 0 || col > width
}
```