

# 54. Spiral Matrix

## Description

Given an `m x n` `matrix`, return *all elements of the matrix in spiral order*.

### Example 1:

1	→	2	→	3
4	→	5		↓
↑				↓
7	←	8	←	9

Input: `matrix = [[1,2,3],[4,5,6],[7,8,9]]`  
Output: `[1,2,3,6,9,8,7,4,5]`

### Example 2:

1	→	2	→	3	→	4
5	→	6	→	7		↓
↑						↓
9	←	10	←	11	←	12

Input: `matrix = [[1,2,3,4],[5,6,7,8],[9,10,11,12]]`  
Output: `[1,2,3,4,8,12,11,10,9,5,6,7]`

### Constraints:

- `m == matrix.length`
- `n == matrix[i].length`
- `1 <= m, n <= 10`
- `-100 <= matrix[i][j] <= 100`

