

## 59. Spiral Matrix II

Given a positive integer  $n$ , generate an  $n \times n$  matrix filled with elements from 1 to  $n^2$  in spiral order.

### Example 1:

1 →	2 →	3 ↓
8 →	9	4 ↓
↑ 7 ←	6 ←	5

Input:  $n = 3$

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

### Example 2:

Input:  $n = 1$

`[[1]]`

### Constraints:

$1 \leq n \leq 20$