# **Leet Code**

# Day-34 Q-01: Rotate Image

You are given an  $n \times n$  2D matrix representing an image, rotate the image by 90 degrees (clockwise).

You have to rotate the image **in-place**, which means you have to modify the input 2D matrix directly. **DO NOT** allocate another 2D matrix and do the rotation.

#### **Example 1:**

1	2	3	7	4	1
4	5	6	8	5	2
7	8	9	9	6	3

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

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

## **Example 2:**

			_			_	
5	1	9	11		15	13	2
2	4	8	10		14	3	4
13	3	6	7		12	6	8
15	14	12	16		16	7	10

```
Input: matrix = [[5,1,9,11],[2,4,8,10],[13,3,6,7],[15,14,12,16]]
Output: [[15,13,2,5],[14,3,4,1],[12,6,8,9],[16,7,10,11]]
```

### Example 3:

```
Input: matrix = [[1]]
Output: [[1]]
```

### Example 4:

```
Input: matrix = [[1,2],[3,4]]
Output: [[3,1],[4,2]]
```

#### **Constraints:**

- matrix.length == n
- matrix[i].length == n
- 1 <= n <= 20
- -1000 <= matrix[i][j] <= 1000