

## Rotate 90 clockwise:

You are given a square matrix of size  $n \times n$ . Your task is to rotate the matrix 90 degrees to the left (counterclockwise). This means that the element at position  $(i, j)$  in the original matrix should move to position  $(n-j-1, i)$  in the rotated matrix.

Input:

- A square matrix **matrix** of size  $n \times n$  where  $n$  is the number of rows and columns.

Output:

- The matrix after rotating it 90 degrees to the left.

Example:

Input:

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

Output:

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

Explanation:

To rotate the matrix 90 degrees to the left (counterclockwise):

Original Matrix:

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

1. Rotation:

- The element at position  $(0, 0)$  moves to position  $(2, 0)$ .
- The element at position  $(0, 1)$  moves to position  $(1, 0)$ .

- The element at position (0, 2) moves to position (0, 0).
- Continue this process for all elements.

Rotated Matrix:

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

This new matrix is the result of rotating the original matrix 90 degrees to the left.