Rotate Image

In this problem we must rotate the matrix in place by 90 degrees clockwise

Key Insight:

A 90° clockwise rotation can be achieved by:

1. Transpose the matrix (swap rows and columns).
2. Reverse each row.

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

- Transpose → [[1,4,7],[2,5,8],[3,6,9]]
- Reverse rows → [[7,4,1],[8,5,2],[9,6,3]]

Complexity:

- Time: $O(n^2)$ (we touch each element once)
- Space: $O(1)$ (in-place)