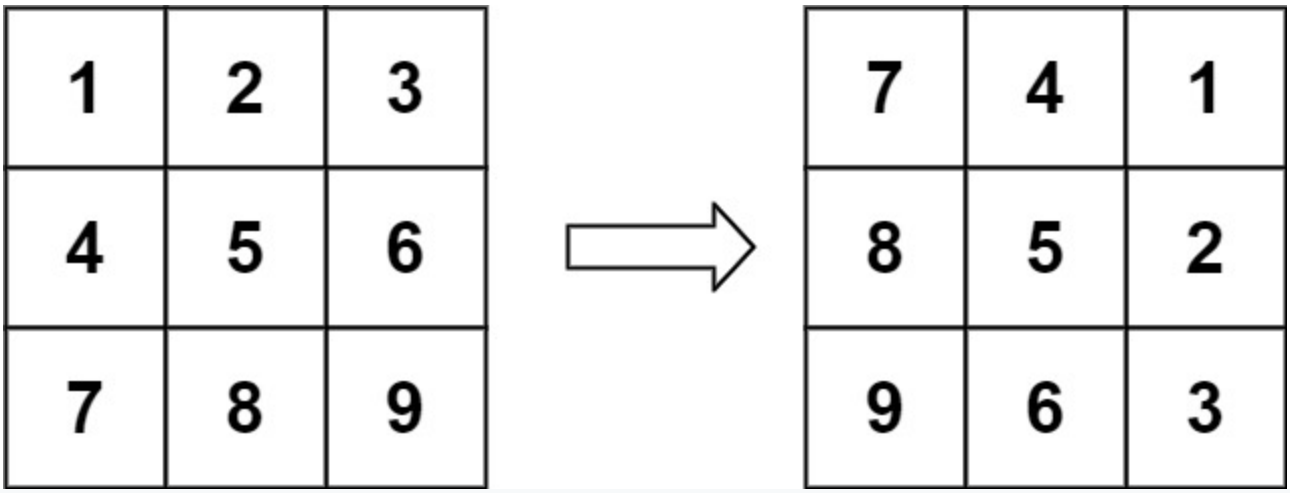
Rotate Image

You are given an `n x 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:




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

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

Steps:
```

1. Transpose the given matrix
2. Reverse the elements in all the rows

```
class Solution {
    public void rotate(int[][] matrix) {
        int n=matrix.length;
        transport(matrix);

        for(int i=0;i<n;i++)
        {
            int l=0, r=n-1;
            while(l<r)
            {
```

```
            int t=matrix[i][l];
            matrix[i][l]=matrix[i][r];
            matrix[i][r]=t;
            l++;
            r--;
        }
    }
  }
  public void transport(int[][] matrix)
  {
    int n=matrix.length;
    for(int i=0;i<n;i++)
    {
      for(int j=i+1;j<n;j++)
      {
        int t=matrix[i][j];
    matrix[i][j]=matrix[j][i];
    matrix[j][i]=t;
      }
    }
  }

}
```