

Medium 8443 465 Add to List Share

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.

The diagram illustrates a permutation of the numbers 1 through 9. On the left is a 3x3 grid containing the numbers 1 to 9 in order. An arrow points to the right, where a second 3x3 grid shows the result of the permutation: the first row contains 7, 4, and 1; the second row contains 8, 5, and 2; and the third row contains 9, 6, and 3.

1	2	3
4	5	6
7	8	9

7	4	1
8	5	2
9	6	3

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

The diagram illustrates a 90-degree clockwise rotation of a 4x4 grid. The original grid (left) contains the numbers 1 through 16. The resulting grid (right) shows the same numbers after rotation, with the first row becoming the last column, the second row becoming the third column, the third row becoming the second column, and the fourth row becoming the first column.

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

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

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

```

1  ▼  class Solution {
2  ▼      public void rotate(int[][] matrix) {
3
4          int dimension = matrix.length;
5
6          //Step 1 :- Transpose the matrix
7  ▼      for(int i = 0; i < dimension; i++){
8  ▼          for(int j = 0; j < i + 1; j++){
9              int temp = matrix[i][j];
10             matrix[i][j] = matrix[j][i];
11             matrix[j][i] = temp;
12         }
13     }
14
15     //Step 2 :- Reverse the rows
16 ▼    for(int i = 0; i < dimension; i++){
17 ▼        for(int j = 0; j < dimension / 2; j++){
18             int temp = matrix[i][j];
19             matrix[i][j] = matrix[i][dimension - j - 1];
20             matrix[i][dimension - j - 1] = temp;
21         }
22     }
23 }
24 }

```

Testcase Run Code Result Debugger  

Accepted Runtime: 0 ms

Your input	[[1,2,3],[4,5,6],[7,8,9]]
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Output	[[7,4,1],[8,5,2],[9,6,3]]	Diff
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Expected	[[7,4,1],[8,5,2],[9,6,3]]
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