



5798. Cyclically Rotating a Grid

My Submissions (/contest/weekly-contest-247/problems/cyclically-rotating-a-grid/submissions/)

Back to Contest (/contest/weekly-contest-247/)

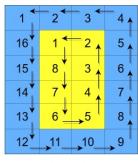
You are given an m x n integer matrix grid, where m and n are both even integers, and an integer

The matrix is composed of several layers, which is shown in the below image, where each color is its own layer:

1	1	1	1
1	2	2	1
1	2	2	1
1	2	2	1
1	2	2	1
1	1	1	1

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

A cyclic rotation of the matrix is done by cyclically rotating each layer in the matrix. To cyclically rotate a layer once, each element in the layer will take the place of the adjacent element in the counter-clockwise direction. An example rotation is shown below:



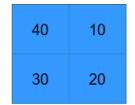


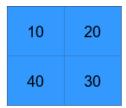
Before rotation

After rotation with k = 1

Return the matrix after applying k cyclic rotations to it.

Example 1:





Before Any Rotations

After One Rotation

Input: grid = [[40,10],[30,20]], k = 1

Output: [[10,20],[40,30]]

Explanation: The figures above represent the grid at every state.

Example 2: