100139. Matrix Similarity After Cyclic Shifts

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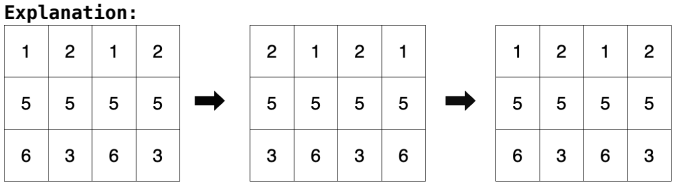
You are given a **0-indexed** `m x n` integer matrix `mat` and an integer `k`. You have to cyclically **right** shift **odd** indexed rows `k` times and cyclically **left** shift **even** indexed rows `k` times.

Return `true` *if the initial and final matrix are exactly the same and* `false` *otherwise.*

User Accepted:	6722
User Tried:	7922
Total Accepted:	6961
Total Submissions:	13187
Difficulty:	Easy

Example 1:

Input: mat = [[1,2,1,2],[5,5,5,5],[6,3,6,3]], k = 2
Output: true
Explanation:



Initially, the matrix looks like the first figure.
Second figure represents the state of the matrix after one right and left cyclic shifts to even
Third figure is the final state of the matrix after two cyclic shifts which is similar to the ir
Therefore, return true.

Example 2:

Input: mat = [[2,2],[2,2]], k = 3
Output: true
Explanation: As all the values are equal in the matrix, even after performing cyclic shifts the matrix will remain the same. Th

Example 3:

Input: mat = [[1,2]], k = 1
Output: false
Explanation: After one cyclic shift, mat = [[2,1]] which is not equal to the initial matrix. Therefore we return false.

Constraints:

- 1 <= mat.length <= 25
- 1 <= mat[i].length <= 25
- 1 <= mat[i][j] <= 25
- 1 <= k <= 50

JavaScript

```
const deepCopy2DArray = (g) => { let d = []; for (const a of g) d.push([...a]); return d; };

const areSimilar = (g, k) => {
    let cg = deepCopy2DArray(g);
    while(k--) {
        for (let i = 0; i < g.length; i++) {
            if (i & 1) {
                g[i].unshift(g[i].pop());
            } else {
                g[i].push(g[i].shift());
            }
        }
    }
```

```
    return JSON.stringify(cg) == JSON.stringify(g);
};
```

Custom Testcase | Use Example Testcases

Run | Submit

Submission Result: Accepted (/submissions/detail/1106529989/) | More Details > (/submissions/detail/1106529989/)

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