

1886. Determine Whether Matrix Can Be Obtained By Rotation

Easy

517

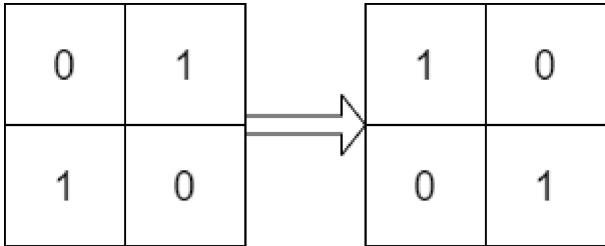
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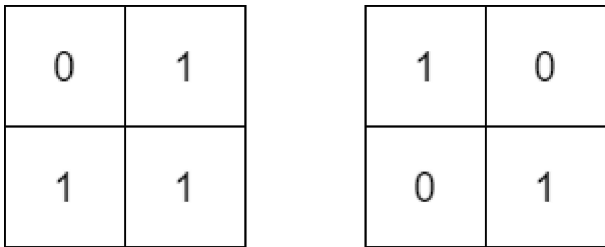
Given two $n \times n$ binary matrices `mat` and `target`, return `true` if it is possible to make `mat` equal to `target` by **rotating** `mat` in **90-degree increments**, or false otherwise.

Example 1:



Input: `mat = [[0,1],[1,0]]`, `target = [[1,0],[0,1]]`
Output: `true`
Explanation: We can rotate `mat` 90 degrees clockwise to make `mat` equal `target`.

Example 2:



Input: `mat = [[0,1],[1,1]]`, `target = [[1,0],[0,1]]`
Output: `false`
Explanation: It is impossible to make `mat` equal to `target` by rotating `mat`.

Example 3:

```
1  class Solution {
2
3      private void rotateMatrix( int[][] mat ) {
4
5          int dimension = mat.length;
6
7          //Transpose the matrix
8          for (int i = 0; i < dimension; i++) {
9              for (int j = i; j < dimension; j++) {
10                 int temp = mat[i][j];
11                 mat[i][j] = mat[j][i];
12                 mat[j][i] = temp;
13             }
14         }
15
16         //Rotate rows
17         for (int i = 0; i < dimension; i++) {
18             for (int j = 0; j < dimension / 2; j++) {
19                 int temp = mat[i][j];
20                 mat[i][j] = mat[i][dimension - j - 1];
21                 mat[i][dimension - j - 1] = temp;
22             }
23         }
24
25     }
26
27     public boolean findRotation( int[][] mat, int[][] target ) {
28
29         //For 90, 180, 270 rotation
30         for (int k = 0; k < 4; k++) {
31
32             rotateMatrix(mat);
33
34             boolean b = Arrays.deepEquals(mat, target);
35
36             if(b)
37                 return true;
38         }
39
40         return false;
41     }
42 }
```