Problem | Editorial | Submissions

Set Matrix Zeroes

Difficulty: **Medium** Accuracy: **52.54%** Submissions: **32K+** Points: **4**

You are given a 2D matrix **mat[][]** of size **n×m**. The task is to modify the matrix such that if **mat[i][j]** is 0, all the elements in the **i**-th row and **j**-th column are set to 0 and do it in **constant space complexity**.

Examples:

Input: mat[][] = [[1, -1, 1],
[-1, 0, 1],
[1, -1, 1]]
Output: [[1, 0, 1],
[0, 0, 0],
[1, 0, 1]]
Explanation: mat[1][1] = 0, so all elements in row 1 and column 1 are updated to zeroes.

Input: mat[][] = [[0, 1, 2, 0],
[3, 4, 5, 2],
[1, 3, 1, 5]]
Output: [[0, 0, 0, 0],

Java (1.8) | Start Timer

```
1  // } Driver Code Ends
36 class Solution {
37     public void setMatrixZeroes(int[][] mat) {
38         int n = mat.length, m = mat[0].length, col0 = 1;
39         for (int i = 0; i < n; i++) {
40             if (mat[i][0] == 0) col0 = 0;
41             for (int j = 1; j < m; j++)
42                 if (mat[i][j] == 0)
43                     mat[i][0] = mat[0][j] = 0;
44         }
45         for (int i = n - 1; i >= 0; i--) {
46             for (int j = m - 1; j >= 1; j--)
47                 if (mat[i][0] == 0 || mat[0][j] == 0)
48                     mat[i][j] = 0;
49             if (col0 == 0) mat[i][0] = 0;
50         }
51     }
52 }
```

Custom Input | Compile & Run | Submit