

Set Matrix Zeroes

[My Submissions \(/problems/set-matrix-zeroes/submissions/\)](#)

Question

Solution

 Total Accepted: **48342** Total Submissions: **152119** Difficulty: **Medium**

Given a $m \times n$ matrix, if an element is 0, set its entire row and column to 0. Do it in place.

[click to show follow up.](#)

Follow up:

Did you use extra space?

A straight forward solution using $O(mn)$ space is probably a bad idea.

A simple improvement uses $O(m + n)$ space, but still not the best solution.

Could you devise a constant space solution?

[Show Tags](#)
[Show Similar Problems](#)

 Have you met this question in a real interview?
[Discuss \(/discuss/questions/oj/set-matrix-zeroes\)](#)

 Python ▼


```

1 class Solution(object):
2     def setZeroes(self, matrix):
3         """
4         :type matrix: List[List[int]]
5         :rtype: void Do not return anything, modify matrix in-place instead.
6         """
7         row=len(matrix)
8         col=0 if row==0 else len(matrix[0])
9         R=0;C=0
10        for i in range(row):
11            for j in range(col):
12                if matrix[i][j]==0:
13                    if i==0:R=1
14                    if j==0:C=1
15                    matrix[i][0]=0
16                    matrix[0][j]=0
17        for i in range(1,row):
18            if matrix[i][0]==0:
19                for j in range(1,col): matrix[i][j]=0
20        for j in range(1,col):

```

✉ Send Feedback (mailto:admin@leetcode.com?subject=Feedback)

```
21         if matrix[0][j]==0:
22             for i in range(1,row):matrix[i][j]=0
23     if R==1:
24         for j in range(1,col):matrix[0][j]=0
25     if C==1:
26         for i in range(1,row):matrix[i][0]=0
```

Custom Testcase ☐

Run Code

Submit Solution

Submission Result: Accepted (/submissions/detail/42423502/)

More Details ➤ (/submissions/detail/42423502/)

Next challenges: (M) Game of Life (/problems/game-of-life/)

Share your acceptance!

Frequently Asked Questions (/faq/) | Terms of Service (/tos/)

[Privacy](#)

Copyright © 2015 LeetCode