

Description

Solution

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Submissions

1428. Leftmost Column with at Least a One

Medium

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(This problem is an *interactive problem*.)

A **row-sorted binary matrix** means that all elements are `0` or `1` and each row of the matrix is sorted in non-decreasing order.

Given a **row-sorted binary matrix** `binaryMatrix`, return *the index (0-indexed) of the **leftmost column** with a 1 in it*. If such an index does not exist, return `-1`.

You can't access the Binary Matrix directly. You may only access the matrix using a `BinaryMatrix` interface:

- `BinaryMatrix.get(row, col)` returns the element of the matrix at index `(row, col)` (0-indexed).
- `BinaryMatrix.dimensions()` returns the dimensions of the matrix as a list of 2 elements `[rows, cols]`, which means the matrix is `rows` x `cols`.

Submissions making more than `1000` calls to `BinaryMatrix.get` will be judged *Wrong Answer*. Also, any solutions that attempt to circumvent the judge will result in disqualification.

For custom testing purposes, the input will be the entire binary matrix `mat`. You will not have access to the binary matrix directly.

Example 1:

| | |
|---|---|
| 0 | 0 |
| 1 | 1 |

Input: `mat = [[0,0],[1,1]]`
Output: `0`

Example 2:

| | |
|---|---|
| 0 | 0 |
| 0 | 1 |

Input: `mat = [[0,0],[0,1]]`
Output: `1`

Example 3:

| | |
|---|---|
| 0 | 0 |
| 0 | 0 |

Input: `mat = [[0,0],[0,0]]`
Output: `-1`

Example 4:

| | | | |
|---|---|---|---|
| 0 | 0 | 0 | 1 |
| 0 | 0 | 1 | 1 |
| 0 | 1 | 1 | 1 |

Input: `mat = [[0,0,0,1],[0,0,1,1],[0,1,1,1]]`
Output: `1`

Constraints:

- `rows == mat.length`
- `cols == mat[i].length`
- `1 <= rows, cols <= 100`
- `mat[i][j]` is either `0` or `1`.
- `mat[i]` is sorted in non-decreasing order.

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0 ~ 6 months

6 months ~ 1 year

1 year ~ 2 years

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```
1 # ""
2 # This is BinaryMatrix's API interface.
3 # You should not implement it, or speculate about its
  implementation
4 # ""
5 #class BinaryMatrix(object):
6 #    def get(self, row: int, col: int) -> int:
7 #        def dimensions(self) -> list[]:
8
9
10 class Solution:
11     def leftMostColumnWithOne(self, binaryMatrix: 'BinaryMatrix') -> int:
```

⋮