

2128. Remove All Ones With Row and Column Flips

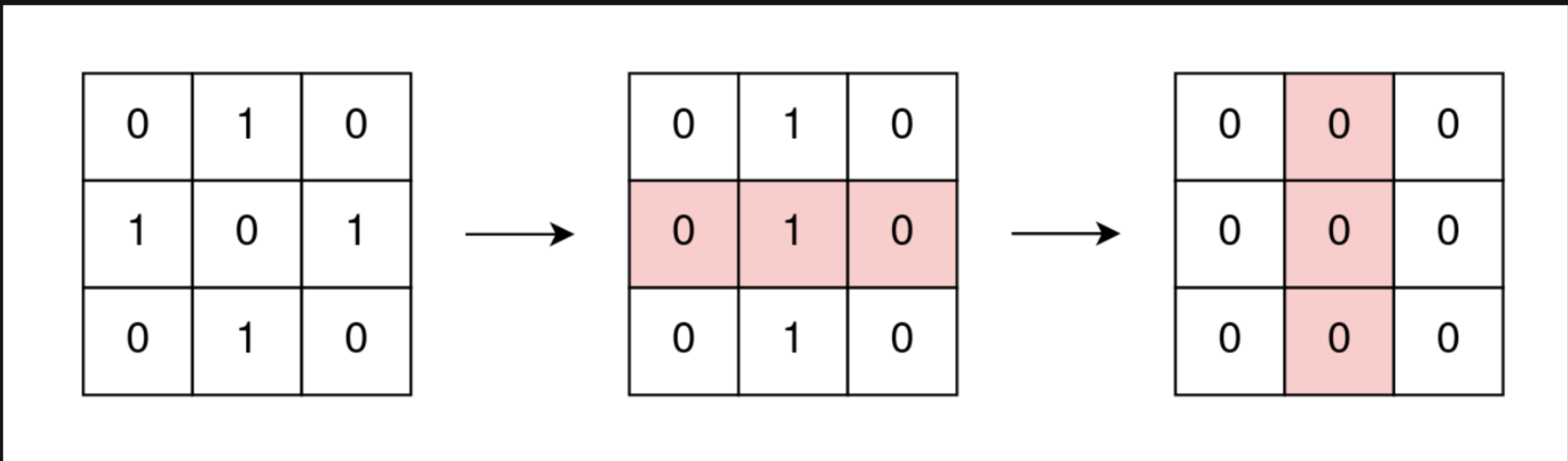
Description

You are given an `m x n` binary matrix `grid`.

In one operation, you can choose **any** row or column and flip each value in that row or column (i.e., changing all `0`'s to `1`'s, and all `1`'s to `0`'s).

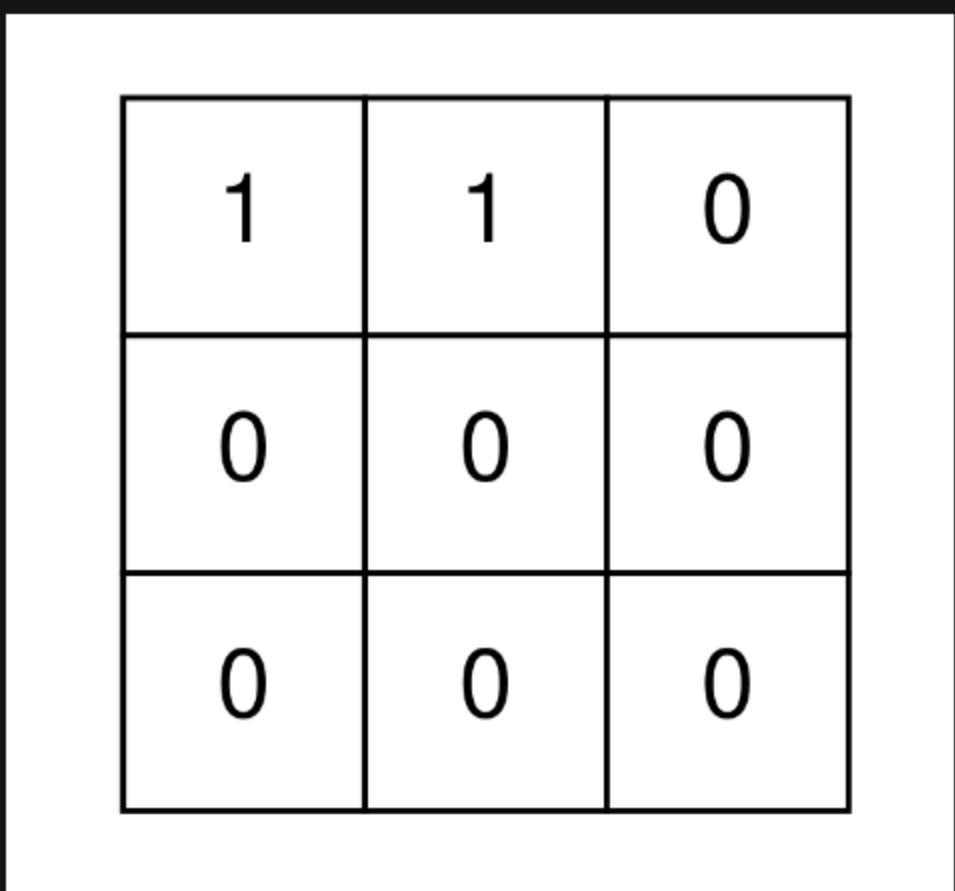
Return `true` *if it is possible to remove all `1`'s from `grid`* using **any** number of operations or `false` otherwise.

Example 1:



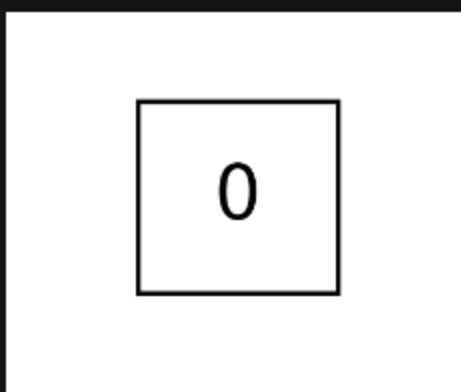
Input: `grid = [[0,1,0],[1,0,1],[0,1,0]]`
Output: `true`
Explanation: One possible way to remove all 1's from grid is to:
- Flip the middle row
- Flip the middle column

Example 2:



Input: `grid = [[1,1,0],[0,0,0],[0,0,0]]`
Output: `false`
Explanation: It is impossible to remove all 1's from grid.

Example 3:



Input: `grid = [[0]]`
Output: `true`
Explanation: There are no 1's in grid.

Constraints:

- `m == grid.length`
- `n == grid[i].length`
- `1 <= m, n <= 300`
- `grid[i][j]` is either `0` or `1`.

