

5931. Stamping the Grid

[My Submissions \(/contest/biweekly-contest-69/problems/stamping-the-grid/submissions/\)](#)

[Back to Contest \(/contest/biweekly-contest-69/\)](#)

You are given an $m \times n$ binary matrix `grid` where each cell is either `0` (empty) or `1` (occupied).

You are then given stamps of size `stampHeight` x `stampWidth`. We want to fit the stamps such that they follow the given **restrictions** and **requirements**:

1. Cover all the **empty** cells.
2. Do not cover any of the **occupied** cells.
3. We can put as **many** stamps as we want.
4. Stamps can **overlap** with each other.
5. Stamps are not allowed to be **rotated**.
6. Stamps must stay completely **inside** the grid.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Hard

Return `true` if it is possible to fit the stamps while following the given restrictions and requirements. Otherwise, return `false`.

Example 1:

✖	1	1	1
✖	1	1	1
✖	1	1	1
✖	1	1	1
✖	2	2	2

Input: `grid = [[1,0,0,0],[1,0,0,0],[1,0,0,0],[1,0,0,0],[1,0,0,0]]`, `stampHeight = 4`, `stampWidth = 3`

Output: `true`

Explanation: We have two overlapping stamps (labeled 1 and 2 in the image) that are able to cover all the empty cells.

Example 2:

✖			
	✖		
		✖	
			✖

Input: `grid = [[1,0,0,0],[0,1,0,0],[0,0,1,0],[0,0,0,1]]`, `stampHeight = 2`, `stampWidth = 2`

Output: `false`

Explanation: There is no way to fit the stamps onto all the empty cells without the stamps going outside the grid.

Constraints:

- $m == \text{grid.length}$
- $n == \text{grid}[r].\text{length}$
- $1 \leq m, n \leq 10^5$
- $1 \leq m * n \leq 2 * 10^5$
- `grid[r][c]` is either `0` or `1`.
- $1 \leq \text{stampHeight}, \text{stampWidth} \leq 10^5$


JavaScript



```
1 /**
2  * @param {number[][]} grid
3  * @param {number} stampHeight
4  * @param {number} stampWidth
5  * @return {boolean}
6  */
7 var possibleToStamp = function(grid, stampHeight, stampWidth) {
8
9  };
```

☐ Custom Testcase[Use Example Testcases](#)[Run](#)[Submit](#)

Copyright © 2022 LeetCode

[Help Center \(/support\)](#) | [Jobs \(/jobs\)](#) | [Bug Bounty \(/bugbounty\)](#) | [Online Interview \(/interview/\)](#) | [Students \(/student\)](#) | [Terms \(/terms\)](#) | [Privacy Policy \(/privacy\)](#) [United States \(/region\)](#)