

542. 01 Matrix

Medium

Topics

Companies

Given an `m x n` binary matrix `mat`, return *the distance of the nearest 0 for each cell*.

The distance between two cells sharing a common edge is `1`.

Example 1:

0	0	0
0	1	0
0	0	0

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

Output: `[[0,0,0],[0,1,0],[0,0,0]]`

Example 2:

0	0	0
0	1	0
1	1	1

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

Output: `[[0,0,0],[0,1,0],[1,2,1]]`

Constraints:

- `m == mat.length`
- `n == mat[i].length`
- `1 <= m, n <= 104`
- `1 <= m * n <= 104`
- `mat[i][j]` is either `0` or `1`.
- There is at least one `0` in `mat`.