

994. Rotting Oranges

Medium

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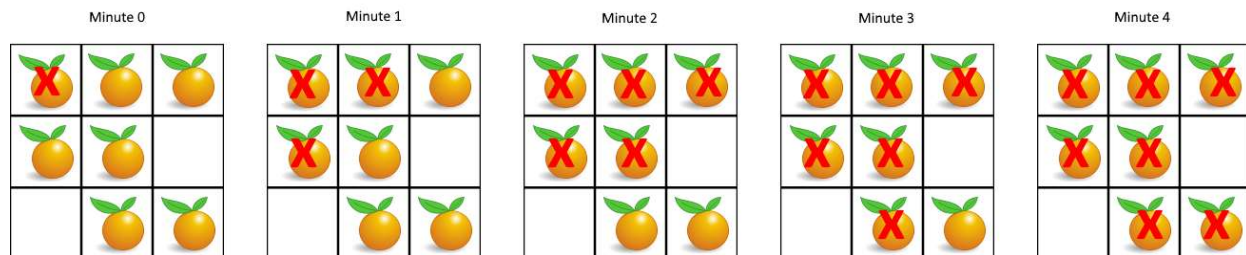
You are given an $m \times n$ grid where each cell can have one of three values:

- 0 representing an empty cell,
- 1 representing a fresh orange, or
- 2 representing a rotten orange.

Every minute, any fresh orange that is 4-directionally adjacent to a rotten orange becomes rotten.

Return the minimum number of minutes that must elapse until no cell has a fresh orange. If this is impossible, return -1.

Example 1:



Input: grid = [[2,1,1],[1,1,0],[0,1,1]]

Output: 4

Example 2:

Input: grid = [[2,1,1],[0,1,1],[1,0,1]]

Output: -1

Explanation: The orange in the bottom left corner (row 2, column 0) is never rotten, because rotting only happens 4-directionally.

Example 3:

Input: grid = [[0,2]]

Output: 0

Explanation: Since there are already no fresh oranges at minute 0, the answer is just 0.

From <<https://leetcode.com/problems/rotting-oranges/>>