

1034. Coloring A Border

Description

You are given an `m x n` integer matrix `grid`, and three integers `row`, `col`, and `color`. Each value in the grid represents the color of the grid square at that location.

Two squares are called **adjacent** if they are next to each other in any of the 4 directions.

Two squares belong to the same **connected component** if they have the same color and they are adjacent.

The **border of a connected component** is all the squares in the connected component that are either adjacent to (at least) a square not in the component, or on the boundary of the grid (the first or last row or column).

You should color the **border** of the **connected component** that contains the square `grid[row][col]` with `color`.

Return *the final grid*.

Example 1:

Input: `grid = [[1,1],[1,2]]`, `row = 0`, `col = 0`, `color = 3`
Output: `[[3,3],[3,2]]`

Example 2:

Input: `grid = [[1,2,2],[2,3,2]]`, `row = 0`, `col = 1`, `color = 3`
Output: `[[1,3,3],[2,3,3]]`

Example 3:

Input: `grid = [[1,1,1],[1,1,1],[1,1,1]]`, `row = 1`, `col = 1`, `color = 2`
Output: `[[2,2,2],[2,1,2],[2,2,2]]`

Constraints:

- `m == grid.length`
- `n == grid[i].length`
- `1 <= m, n <= 50`
- `1 <= grid[i][j], color <= 1000`
- `0 <= row < m`
- `0 <= col < n`

