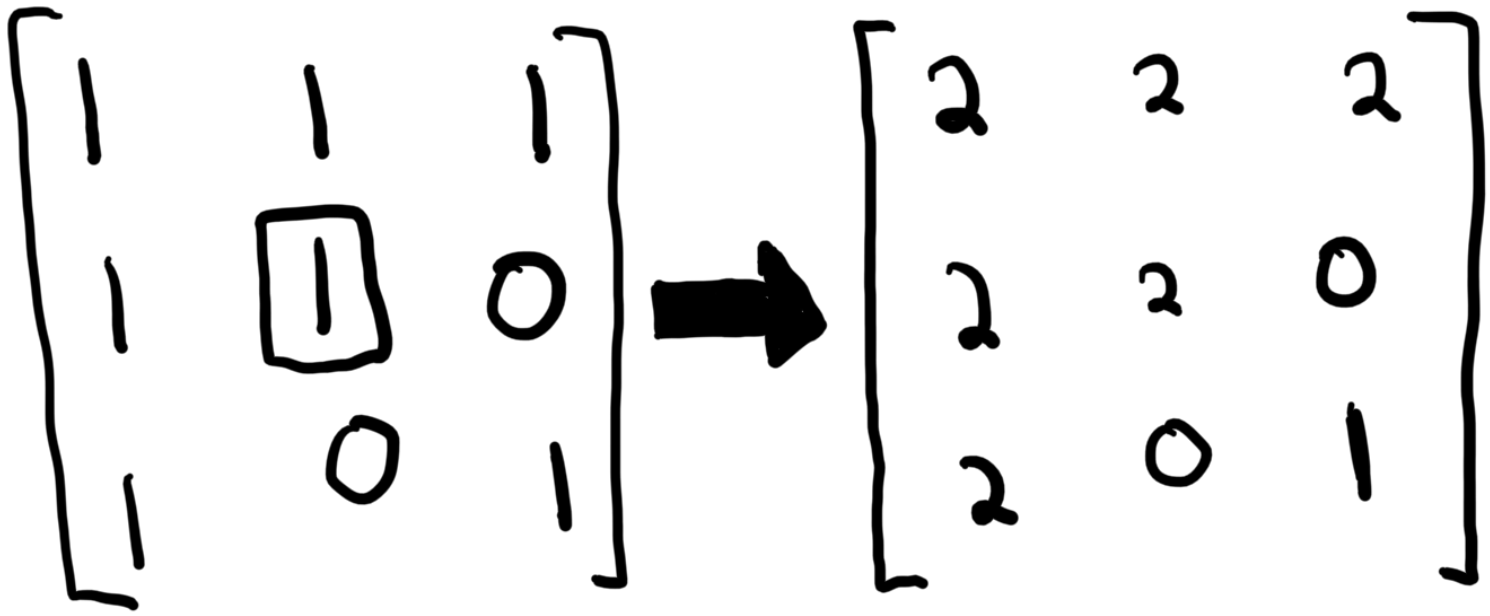
733. Flood Fill

Given: m x n grid - image
image[i][j] represents
the pixel at that point

sr - starting row
sc - starting column
newColor

Perform a flood fill starting from
(sr, sc)

flood fill: Consider the start pixel
+ any 4 directionally connected
pixels of the same color, + any
4 directionally connected to those.
Replace the color of said pixels
w/ new Color.



Solution 1: Breadth-First Search

- add (sr, sc) to queue
- while queue is not empty:
  - change color of cell
  - add neighbors of interest
- return the image

Time: O(M×N)
Space: O(M×N)

Solution 2: depth-First Search

- call dfs(sr, sc)
- dfs:
  - base case: OOB or wrong color
  - else:
    - paint (row, col)

Time: O(M×N)
Space: O(M×N)

- Call dfs for all neighbors

- Return the image

NOTE: no visited required
Since we are mutating cells as we visit them.