

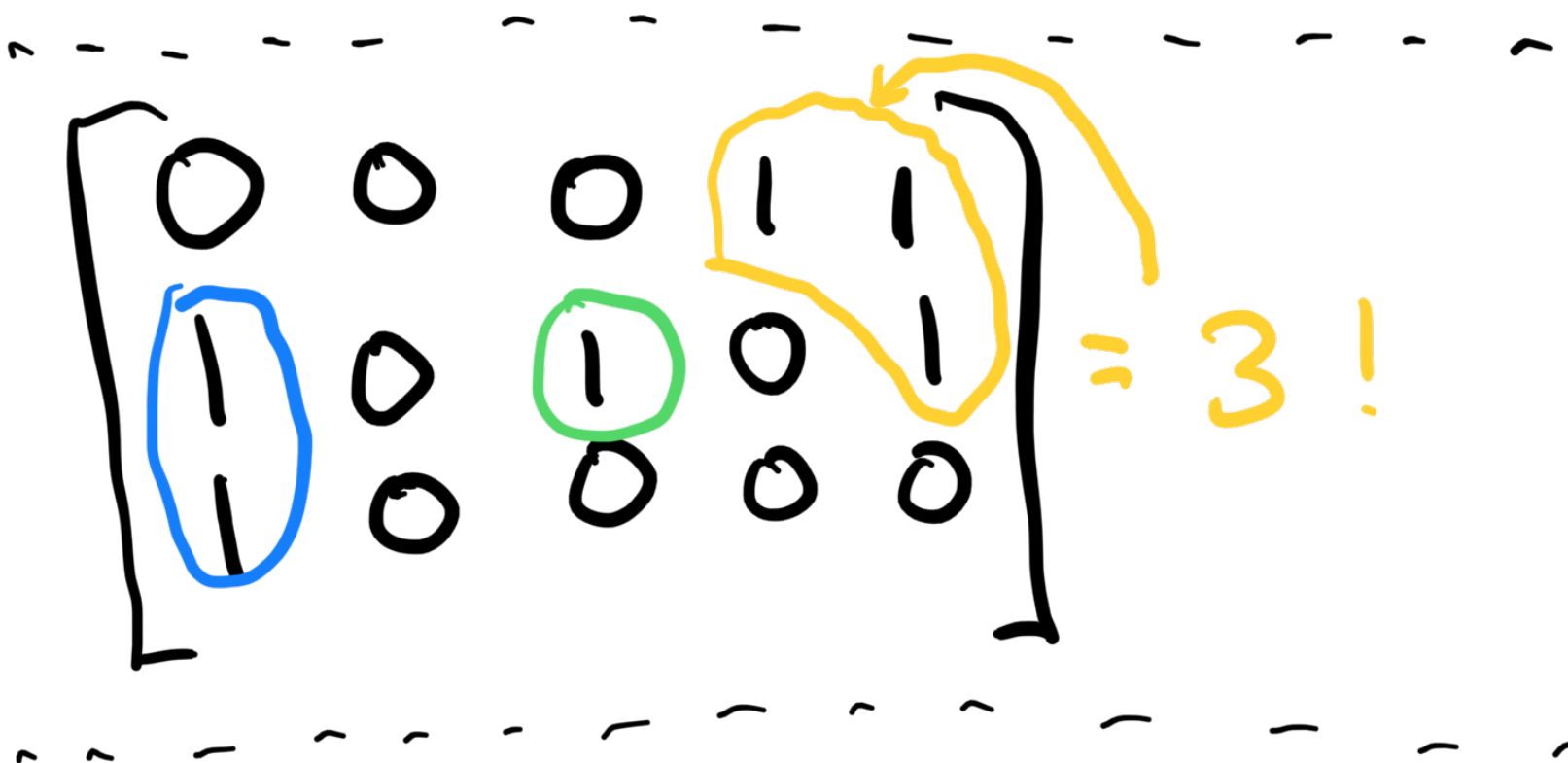
# 695. Max Area of Island

Given:  $m \times n$  matrix - grid

island = group of 1's connected  
4-directionally (no diagonal conn)

assume 00B = water

return the maximum area of  
an island in the grid, if  
no islands, return 0.



# Solution: DFS

- answer = 0

- for each (row, col):

- if island & not visited:

Time:  $O(m \times n)$     size = dfs(row, col)

Space:  $O(m \times n)$     answer = max(answer, size)

- dfs:

- if OOB or visited or water:

- return 0

- return 1 + dfs(neighbors)

....

- return answer