**Justin\_DepthfirstSearch\_0733. Flood Fill**

**Concept:**

不斷搜尋每個點的4周，直到沒辦法走

**Code:**

class Solution:

def floodFill(self, image: List[List[int]], sr: int, sc: int, newColor: int) -> List[List[int]]:

rows = len(image)

cols = len(image[0])

color\_to\_change = image[sr][sc]

def dfs(r, c):

nonlocal rows, cols, newColor, image

if r < 0 or c < 0 or r > rows-1 or c > cols-1 or image[r][c] == newColor or image[r][c] != color\_to\_change:

return

image[r][c] = newColor

# radiate in four directions

dfs (r + 1, c)

dfs (r - 1, c)

dfs (r, c + 1)

dfs (r, c - 1)

dfs(sr, sc)

return image