장애물 인식 프로그램

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References

Softeer

https://softeer.ai/practice/info.do?idx=1&eid=409

1. Depth First Search

```
import sys

n = int(sys.stdin.readline())
board = []
for _ in range(n):
    board.append(list(map(int, list(sys.stdin.readline().split("\n")[0]))))

def search(i, j):
    stack = [(i, j)]
    cnt = 1
    while stack:
        cur_i, cur_j = stack.pop()
        for di, dj in [(-1, 0), (1, 0), (0, -1), (0, 1)]:
            if cur_i + di < 0 or cur_i + di > n - 1 or cur_j + dj < 0 or cur_j + dj > n - 1:
                continue
            if board[cur_i + di][cur_j + dj]:
                board[cur_i + di][cur_j + dj] = 0
                stack.append((cur_i + di, cur_j + dj))
                cnt += 1
    return cnt

result = []
for i in range(n):
```

```
    for j in range(n):
        if board[i][j]:
            board[i][j] = 0
            result.append(search(i, j))

print(len(result))
for r in sorted(result):
    print(r)
```