벽 부수고 이동하기

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2206번: 벽 부수고 이동하기

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‹›› https://www.acmicpc.net/problem/2206

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1. BFS + Dynamic Programming

```
import collections
import sys


def sol():
    n, m = map(int, sys.stdin.readline().split())

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

    route = [(-1, 0), (0, -1), (0, 1), (1, 0)]

    dp = [[[0, 0] for _ in range(m)] for _ in range(n)]
    queue = collections.deque([[0, 0, 0]])
    dp[0][0][0] = 1
    while queue:
        x, y, wall_used = queue.popleft()

        if x == n - 1 and y == m - 1:
            print(dp[x][y][wall_used])
            return
```

```
        for dx, dy in route:
            if x + dx < 0 or x + dx > n - 1 or y + dy < 0 or y + dy > m - 1:
                continue
            if matrix[x + dx][y + dy] == 0 and dp[x + dx][y + dy][wall_used] == 0:
                dp[x + dx][y + dy][wall_used] = dp[x][y][wall_used] + 1
                queue.append([x + dx, y + dy, wall_used])
            elif matrix[x + dx][y + dy] == 1 and wall_used == 0:
                dp[x + dx][y + dy][1] = dp[x][y][wall_used] + 1
                queue.append([x + dx, y + dy, 1])

    print(-1)
    return


sol()
```