

## 3286. Find a Safe Walk Through a Grid

Medium  Topics  Hint

You are given an  $m \times n$  binary matrix `grid` and an integer `health`.

You start on the upper-left corner  $(0, 0)$  and would like to get to the lower-right corner  $(m - 1, n - 1)$ .

You can move up, down, left, or right from one cell to another adjacent cell as long as your health *remains positive*.

Cells  $(i, j)$  with `grid[i][j] = 1` are considered **unsafe** and reduce your health by 1.

Return `true` if you can reach the final cell with a health value of 1 or more, and `false` otherwise.

### Example 1:

**Input:** `grid = [[0,1,0,0,0],[0,1,0,1,0],[0,0,0,1,0]]`, `health = 1`

**Output:** `true`

**Explanation:**

The final cell can be reached safely by walking along the gray cells below.

0	1	0	0	0
0	1	0	1	0
0	0	0	1	0

### Example 2:

**Input:** `grid = [[0,1,1,0,0,0],[1,0,1,0,0,0],[0,1,1,1,0,1],[0,0,1,0,1,0]]`, `health = 3`

**Output:** `false`

**Explanation:**

A minimum of 4 health points is needed to reach the final cell safely.

0	1	1	0	0	0
1	0	1	0	0	0
0	1	1	1	0	1
0	0	1	0	1	0

### Example 3:

**Input:** `grid = [[1,1,1],[1,0,1],[1,1,1]]`, `health = 5`

**Output:** `true`

**Explanation:**

The final cell can be reached safely by walking along the gray cells below.

1	1	1
1	0	1
1	1	1

Any path that does not go through the cell  $(1, 1)$  is unsafe since your health will drop to 0 when reaching the final cell.

### Constraints:

- $m == \text{grid.length}$
- $n == \text{grid}[i].length$
- $1 \leq m, n \leq 50$
- $2 \leq m * n$
- $1 \leq \text{health} \leq m + n$
- `grid[i][j]` is either 0 or 1.

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