

## 892. Surface Area of 3D Shapes

Solved ●

Easy Topics Companies

You are given an  $n \times n$  grid where you have placed some  $1 \times 1 \times 1$  cubes. Each value  $v = \text{grid}[i][j]$  represents a tower of  $v$  cubes placed on top of cell  $(i, j)$ .

After placing these cubes, you have decided to glue any directly adjacent cubes to each other, forming several irregular 3D shapes.

Return the total surface area of the resulting shapes.

**Note:** The bottom face of each shape counts toward its surface area.

**Example 1:**

1	2
3	4

**Input:** `grid = [[1,2],[3,4]]`

**Output:** 34

**Example 2:**

1	1	1
1	0	1
1	1	1

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

**Output:** 32

**Example 3:**

2	2	2
2	1	2
2	2	2

**Input:** grid = [[2,2,2],[2,1,2],[2,2,2]]  
**Output:** 46

Constraints:

- `n == grid.length == grid[i].length`
- `1 <= n <= 50`
- `0 <= grid[i][j] <= 50`

Seen this question in a real interview before? 1/5

Yes No

Accepted 41.5K Submissions 62.5K Acceptance Rate 66.4%

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