On a N \* N grid, we place some 1 \* 1 \* 1 cubes.

Each value v = grid[i][j] represents a tower of v cubes placed on top of grid cell (i, j).

Return the total surface area of the resulting shapes.

**Example 1:**

**Input:** [[2]]

**Output:** 10

**Example 2:**

**Input:** [[1,2],[3,4]]

**Output:** 34

**Example 3:**

**Input:** [[1,0],[0,2]]

**Output:** 16

**Example 4:**

**Input:** [[1,1,1],[1,0,1],[1,1,1]]

**Output:** 32

**Example 5:**

**Input:** [[2,2,2],[2,1,2],[2,2,2]]

**Output:** 46

**Note:**

* 1 <= N <= 50
* 0 <= grid[i][j] <= 50