2. Python: Dominant Cells

There is a given list of lists of integers that represent a 2-dimensional grid with *n* rows and *m* columns. A cell is called a *dominant cell* if it has a strictly greater value than all of its neighbors. Two cells are neighbors when they share a common side or a common corner, so a cell can have up to 8 neighbors. Find the number of dominant cells in the grid.

Function Description

Complete the function *numCells* in the editor below.

numCells has the following parameter(s):

int grid[n][m]: a 2-dimensional array of integers

Returns

int: the number of dominant cells in the grid

Constraints

- $1 \leq n, m \leq 500$
- There are at least 2 cells in the grid.
- $1 \leq grid[i][j] \leq 100$

▼ Sample Case 0

Sample Input 0

```
STDIN       Function
-----       --------
3      →    n = 3
3      →    m = 3
1 2 7  →    grid = [[1, 2, 7], [4, 5, 6], [8, 8, 9]]
4 5 6
8 8 9
```

Sample Output 0

```
2
```

Explanation 0

There are 3 cells that have strictly greater values than all their neighboring cells. These cells are:

- the bottom right value, 9, with neighbors of 5, 6 and 8
- the top right value, 7, with neighbors of 2, 5 and 6

Notice that the 8 at bottom left is not a dominant cell. It is not strictly greater than the cell to its right with a value of 8.