

Question :

Minesweeper Numbers

Please read [important information](#) first.

Description

You are given a 2 dimensional list (**board**) consists of 1s and 0s which correspond to "has mine" and "has no mine" respectively.

You are expected to create a new 2 dimensional list that is the same size as (**board**).

In this new list, each element's value is the total number of mines around them and the value of mines are 0.

An example input and expected output are shown below.

0	0	0	0	1	0		1	1	1	2	0	2
0	1	0	0	1	0		1	0	2	4	0	3
0	0	0	1	1	0	→	3	3	3	0	0	3
1	1	0	0	1	0		0	0	3	4	0	3
0	1	0	0	1	0		3	0	2	2	0	2

Some examples :

For 0,0 (top left), there is only one neighbouring mine, so we make it 1 in our new list.

For 1,1 there is already a mine, so we make it 0 in our new list.

For 3,3 there are 4 neighbouring mines (top, top-right, right and bottom-right cells have mines out of 8 neighbouring cells), so we make it 4 in our new list.

User Inputs:

- height : height of the board
- width : width of the board
- board : 2-dimensional list that contains 0s and 1s. Its size can change.

Warning: You should **not** take any user input, instead use the variables given to you.

Outputs:

- 2-d list with expected values

Warning: Check the example for output format.

Warning: You are **not** allowed to use any imports.

Examples:

height	width	board	output
5	6	[[0, 0, 0, 0, 1, 0], [0, 1, 0, 0, 1, 0], [0, 0, 0, 1, 1, 0], [1, 1, 0, 0, 1, 0], [0, 1, 0, 0, 1, 0]]	[[1, 1, 1, 2, 0, 2], [1, 0, 2, 4, 0, 3], [3, 3, 3, 0, 0, 3], [0, 0, 3, 4, 0, 3], [3, 0, 2, 2, 0, 2]]