

## Problem L. MAMZ Sweeper

A MAMZ-Sweeper field is a  $n \times m$  rectangle, where each cell is either empty or contains a MAMZ. Arsalan wants to find the location of all MAMZs; Since he needs all of them for the IUT-CPC website's back-end.

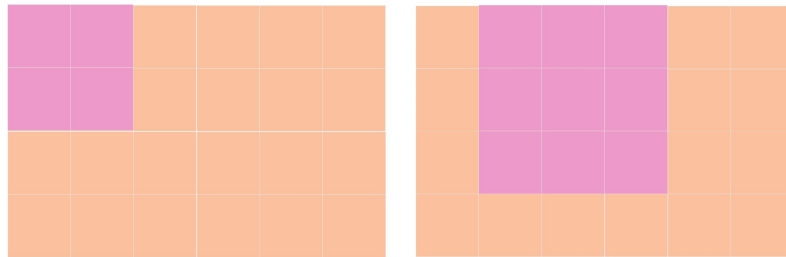


Figure 1: On the left there is a MAMZ-Radar in  $(0, 0)$  cell. On the right there is a MAMZ-Radar in  $(1, 2)$ .

However, Nobody exactly knows where MAMZs are, yet we have MAMZ-Radar, which can count the number of MAMZs in wherever it is used and its neighbors. Sepovsky is very Zahmat-Kesh, Therefore, for helping Arsalan, he used the MAMZ-Radar in all cells to scan them. In order to help Arsalan and Sepovsky, find any possible way for the MAMZs position.

### Input

In the first line of input you are given  $n$  and  $m$ . ( $1 \leq n, m \leq 1000$ )

In each of the next  $n$  lines there is a string of  $m$  characters. every character is output of the MAMZ-Radar in that cell, which is the number of MAMZs in that cell and its 8 neighbors (number of neighbors for perimeter cells is less).

### Output

Print a MAMZ-Sweeper field which is acceptable under problem circumstances.

### Examples

test	answer
3 3	011
233	010
244	001
122	