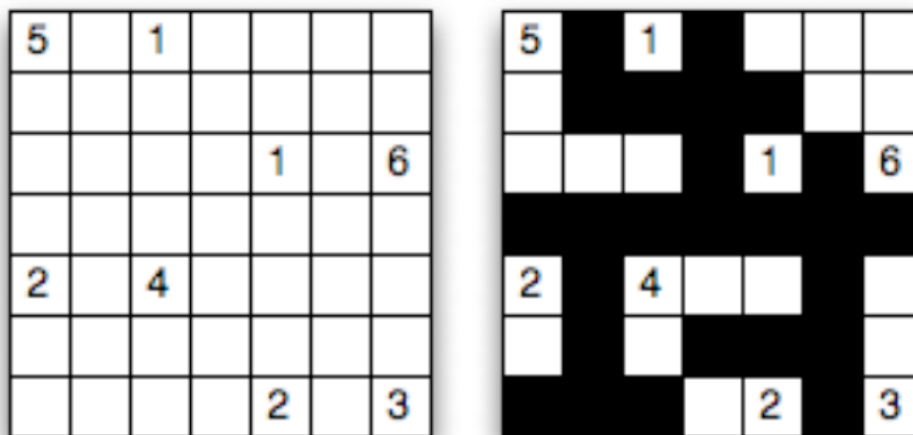


4180 Nurikabe

Write a program to solve a Nurikabe puzzle. This is played on a rectangular grid in which there are some cells which contain a number. You have to completely divide the grid into land and water, where land cells are colored white and water cells are colored black. A cell with a number must be colored white.



An island is a connected region of land cells in which exactly one cell contains a number — the number of cells in the island. All water cells together must also be connected. The water region may not contain any 2×2 block of water cells. Two cells count as connected if they can be travelled by a rook, i.e., if they are horizontally or vertically adjacent — being diagonally adjacent does not count as connected.

Input

Input to your program consists of lines with numbers, separated by white space. The first line contains the number of rows and columns of the grid, each is less than 25. Each subsequent line describes one row and contains one number per cell in the row. The number is positive for some land-cells-to-be and zero otherwise.

Output

Your program should output the grid as lines consisting of periods for white cells and x for black cells, or a single line with the word 'no' if there is no solution.

Sample Input

```
7 7
5 0 1 0 0 0 0
0 0 0 0 0 0 0
0 0 0 0 1 0 6
0 0 0 0 0 0 0
2 0 4 0 0 0 0
0 0 0 0 0 0 0
0 0 0 0 2 0 3
```

Sample Output

```
.x.x...  
.xxxx..  
...x.x.  
xxxxxxxx  
.x...x.  
.x.xxx.  
xxx..x.
```