Problem F. Folding a paper

You love art. Today, you prepared a sheet of paper which has a grid form with n rows and m columns, and painted some cells into black.

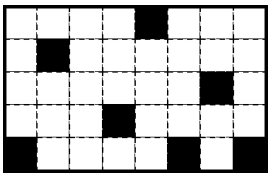
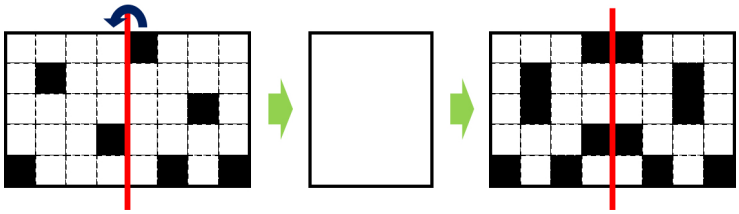


Рис. 1: An example of a painted sheet when $n = 5$, $m = 8$.

You want to make a symmetric picture, so you decided to fold the paper into half vertically. Then, if an empty cell touches a painted cell, both cells will be painted into black. So when you unfold the paper again, you will get a symmetric picture.



Given the size and the state of the sheet, find the state after folding into half and unfolding it.

Input

The input consists of an arbitrary number of records, but no more than 30.

Each record begins with a line consisting of two positive integers n ($1 \leq n \leq 10$) and m ($1 \leq m \leq 10$, m is even), representing the height and width of the sheet, respectively. Next n lines of m characters represent the state of the sheet, in left-to-right, top-to-bottom order. The symbols '#' represents a painted cell, and '.' represents an empty cell.

The end of input is indicated by a line containing only the value -1.

Output

For each record, output n lines representing the resulting state, with the same format of the input.

Example

standard input	standard output
5 8 ....#... .#...... ......#. ...#.... #....#.# 3 4 .... ..#. .#.. -1	...##... .#....#. .#....#. ...##... #.#..#.# .... .##. .##.

Time Limit

1 second.