Okvir

Problem ID: okvir
CPU Time limit: 1 second
Memory limit: 1024 MB
Difficulty: 2.0

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Mirko has assembled an excellent crossword puzzle and now he wants to frame it. Mirko's crossword puzzle consists of $M \times N$ letters, and the frame around it should be U characters wide on top, L characters on the left, R characters on the right and D characters on the bottom side.

The frame consists of characters `#` (hash) and `.` (dot) which alternate like fields on a chessboard. These characters should be arranged in a way that, if the frame is expanded to cover the entire crossword puzzle and we treat these characters as a chessboard, the `#` characters should be placed as the red fields on a chessboard (i.e. the top left field). See the examples below for a better understanding of the task.

Input

The first line of input contains two integers

$$and$$

($1 \leq M, N \leq 10$). The second line of input contains integers U, L, R, D ($0 \leq U, L, R, D \leq 5$). The following M lines of input contains N characters — lowercase letters of the English alphabet. These lines represent Mirko's crossword puzzle.

Output

Output the framed crossword puzzle as stated in the text.

Sample Input 1

```
4 4
2 2 2 2
honi
oker
nera
irak
```

Sample Output 1

```
#.#.#.#.
.#.#.#.#
#.honi#.
.#oker.#
#.nera#.
.#irak.#
#.#.#.#.
.#.#.#.#
```

Sample Input 2

```
2 4
1 0 3 1
rima
mama
```

Sample Output 2

```
#.#.#.#
rima.#.
mama#.#
.#.#.#.
```