Problem B. Picture Frame

Time limit   2000 ms
Mem limit   262144 kB

Problem Statement

You are given a image with a height of H pixels and a width of W pixels. Each pixel is represented by a lowercase English letter. The pixel at the i-th row from the top and j-th column from the left is a_{ij}.

Put a box around this image and output the result. The box should consist of `#` and have a thickness of 1.

Constraints

- $1 \le H, W \le 100$
- a_{ij} is a lowercase English letter.

Input

Input is given from Standard Input in the following format:

```
H  W
a₁₁ ... a₁W
:
aH1 ... aHW
```

Output

Print the image surrounded by a box that consists of `#` and has a thickness of 1.

Sample 1

Input	Output
2 3 abc arc	##### #abc# #arc# #####

Sample 2

Input	Output
1 1 z	### #z# ###