

## A. Letter

time limit per test: 1 second  
memory limit per test: 64 megabytes

A boy Bob likes to draw. Not long ago he bought a rectangular graph (checked) sheet with  $n$  rows and  $m$  columns. Bob shaded some of the squares on the sheet. Having seen his masterpiece, he decided to share it with his elder brother, who lives in Flatland. Now Bob has to send his picture by post, but because of the world economic crisis and high oil prices, he wants to send his creation, but to spend as little money as possible. For each sent square of paper (no matter whether it is shaded or not) Bob has to pay 3.14 burles. Please, help Bob cut out of his masterpiece a rectangle of the minimum cost, that will contain all the shaded squares. The rectangle's sides should be parallel to the sheet's sides.

### Input

The first line of the input data contains numbers  $n$  and  $m$  ( $1 \leq n, m \leq 50$ ),  $n$  — amount of lines, and  $m$  — amount of columns on Bob's sheet. The following  $n$  lines contain  $m$  characters each. Character « . » stands for a non-shaded square on the sheet, and « \* » — for a shaded square. It is guaranteed that Bob has shaded at least one square.

### Output

Output the required rectangle of the minimum cost. Study the output data in the sample tests to understand the output format better.

### Examples

|  |                      |
|--|----------------------|
| <b>input</b>   | <a href="#">Copy</a> |
| <pre>6 7 ..... ..***. ..*... ..***. ..*... ..***. ..***.</pre> |                      |
| <b>output</b>  | <a href="#">Copy</a> |
| <pre>*** *.. *** *.. ***</pre>                                 |                      |
| <b>input</b>   | <a href="#">Copy</a> |
| <pre>3 3 *** *. ***</pre>                                      |                      |
| <b>output</b>  | <a href="#">Copy</a> |
| <pre>*** *.* ***</pre>   |                      |

### → Attention

The package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, a solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then the value 800 ms will be displayed and used to determine the verdict.

### Codeforces Beta Round 14 (Div. 2)

Finished

Practice



### → Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

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[Clone Contest](#)

### → Submit?

Language: [GNU G++23 14.2 \(64 bit, ms\)](#)

Choose file: [Choose File](#) No file chosen

[Submit](#)

### → Last submissions

| Submission                | Time              | Verdict  |
|---------------------------|-------------------|----------|
| <a href="#">326078592</a> | Jun/26/2025 07:43 | Accepted |

→ **Problem tags**

implementation \*800

No tag edit access

→ **Contest materials**

- Announcement
- Tutorial

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