(Ir)Responsible Shreyas

time limit per test case: 2 seconds memory limit per test case: 1 gigabyte

After fracturing his arm after falling from his wave-board, Shreyas took up the responsibility of creating a safe environment for newbies to learn how to ride skateboards and wave-boards. IIITH Administration gave him permission to make a skateboard park in the forest near the main gate, under the only condition that he cannot cut any trees.

The forest can be described by a grid G having N rows and M columns, where the element at the i^{th} row and j^{th} column is denoted by $G_{i,j}$. $G_{i,j}$ is "*" if there is a tree at that location, and "." if it is empty.

Shreyas wants to find **the maximum area of a rectangular field** that can be placed in the forest so that **it does not have any trees in it**. Shreyas is busy (watching anime), so he asks for your help.

Note that area of a rectangle is calculated by counting the number of grid elements in the rectangle.

Constraints

Subtask 1 (30 marks)

```
1 \le N, M \le 50
G_{i,j} = "*" \text{ or "." (without the quotes)}
```

Subtask 2 (70 marks)

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1 \le N, M \le 1000
G_{i,j} = "*" \text{ or "." (without the quotes)}
```

Input

The first line contains two integers N and M, which denotes the size of the forest grid. The next N line contains M character strings describing the forest. Each character is "." (empty) or "*" (has a tree).

Output

Output contains a single integer denoting the maximum area of a rectangular field that can be placed in the forest so that it does not have any trees in it.

Sample test cases

Test case 1

Input

4 7 ...*.*.

.*....

.....*

Output

12

Explanation

The rectangle with corners at (2,3) and (4,6) has the largest area. Thus, the area is 12.

