We give you a painting of a snake. The lowercase letters ‘x’ indicate parts of the snake, and the characters ‘.’ represent empty spaces. The snake consists of a sequence of horizontal and vertical adjacent segments formed by letters ‘x’. Successive fragments in the snake have a ‘x’ in common, that belongs to the two fragments. There is not any ‘x’ letter of different fragments of the word that is vertical or horizontal adjacent. For instance, the following snake has 6 fragments.

```
xxxxx...
....xxxx
.x.....x
.xxxxxxx
```

Given the draw of a snake, determine the length of its longest segment.

**Input**

The input contains various paintings of snake. Each painting of snake consists of two integer numbers followed by a table of letters ‘x’ and ‘.’. The integer numbers specify the number of rows and columns of the painting of the snake. Each painting contains only a snake.

**Output**

For each painting, your program must print a line with the corresponding result.

<table>
<thead>
<tr>
<th>Sample input 1</th>
<th>Sample output 1</th>
</tr>
</thead>
</table>
| 3 9
x.xxx.xxx
x.x.x.x.x
xxx.xxx.x |
| 3                           |

<table>
<thead>
<tr>
<th>Sample input 2</th>
<th>Sample output 2</th>
</tr>
</thead>
</table>
| 4 6
xxxxx.
...x.
...x.
...... |
| 4                           |