Snaky P57940_en

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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.

Sample input 1

```
3 9
x.xxx.xxx
x.x.x.x.x
xxx.xxx.x
```

Sample output 1

```
3
```

Sample input 2

```
4 6
xxxx..
...x..
...x..
......
```

Sample output 2

```
4
```

Problem information

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