People generally don't care to give attention to stars in a moonlit night. In most cases the attention goes towards the moon. Sadly, you have to write a program now that can count the stars in the sky. For this problem a sky is a two dimensional grid. Empty pixel is denoted by a '.' (ASCII value 46) and a non-empty pixel is denoted by a '*' (ASCII value 42). As a star is a very small object so it cannot occupy more than one pixel and in our sky two stars are never adjacent. So two or more adjacent non-empty pixels can denote some larger objects like moon, comet, sun or UFOs but they never represent a star. All the eight possible pixels around a pixel are adjacent to it. In the figure below the black pixel at the center have eight adjacent pixels. Of them three pixels are non-empty.

$$*\ .\ .$$

$$.\ **$$

$$.\ .\ *$$

Input

The input file contains at most 1000 sets of inputs. The description of each set is given below:

Each set starts with two integer number r and c ($0 < r, c < 101$), which indicates the row and column number of the image to follow. Next r rows describe the sky as mentioned in the problem statement. Input is terminated by a line containing two zeroes.

Output

For each set of input produce one line of output. This line contains a decimal integer which denotes the number of stars in the given sky.

Sample Input

```
5 5
.....
....*
....*
...*.
*....
4 3
...
.*.
...
*.*
0 0
```

Sample Output

```
1
3
```