Find X

Evan the scavenger is going on a treasure hunt. He received a map from his friend Michael the explorer. He is going alone in this treasure hunt since his friend, Michael the explorer, is off exploring Hyrule, a country consisted of many islands, by himself.

Being all alone does not stop Evan from going treasure hunting. However, the treasure map that Michael gave Evan is confusing, to say the least. Usually, in treasure maps, 'X marks the spot'. But in this treasure map, there are a lot of 'X's!

Bewildered, Evan called Michael to ask for explanation about this map. Fortunately, after hearing Michael's explanation, Evan began to understand how to read this very peculiar map. The map is divided into R x C squares, arranged in R rows and C columns. Each square is either represented by a '.' (dot) or an 'X'. There are a lot of treasures hidden, and this map shows exactly where the treasures are. Each treasure is hidden under a so-called 'super X', a square of size at least 3 (three) that is composed entirely of 'X' on both its diagonals.

Evan looks at the map and see a lot of 'X's:

X	.	.	.	X
.	X	.	X	.
.	.	X	.	.
.	X	.	X	.
X	.	.	.	X

In the above map, there are two 'super X's, each having the same centre (3,3). One super X is of size 3 while the other is of size 5[1]. Any X can be a part of any number of 'super X's and not all 'X's are necessarily a part of a 'super X'.

Evan wants to know how many treasures are hidden in this plot of land. Hence, your task is to help Evan by counting how many 'super X's are there in the given map.

Input

The first line of the input consists of two integers, **R** and **C** (1 <= **R, C** <= 50), separated by a single space, indicating the number of rows and columns of the map. **R** lines follow. In each line, there are **C** characters, each being a '.' or 'X'. Note that there are no spaces separating each character in each of the **R** lines.

Output

Print the number of 'super X's in the given map.

Sample Input	Sample Output
5 5 X...X .X.X. ..X.. .X.X. X...X	2

[1] Since there are two 'super X's, there are two treasures hidden. It doesn't matter if they share the same centre. Each super X has its own treasure.

Explanation

The map above can be represented in the following grid:

X	.	.	.	X
.	X	.	X	.
.	.	X	.	.
.	X	.	X	.
X	.	.	.	X

The first and second super X are centred in (3,3). The first super X is of size 3 and the second super X is of size 5.

Clarification

These are valid 'super X's:

X	.	.	.	X
.	X	.	X	.
.	.	X	.	.
.	X	.	X	.
X	.	.	.	X

There are two 'super X's, as explained in the sample input and problem statement above.

X	.	.	X	X
.	X	X	X	.
.	X	X	.	.
X	.	.	X	.
X	.	.	.	.

There is one 'super X' of size 4 in the given map. All other 'X's are not part of any 'super X'.

These are not valid 'super X's:

X	.	.	.	X
.	X	.	X	.
.	.	X	.	.
.	X	.	.	.
X	.	.	.	X

There is one 'X' missing on one of the diagonals, hence there are no super X in the given map.

X	X
X	X

This map, although both of its diagonals consist of only 'X's, the size is only 2. A 'super X' must have a size of at least 3.