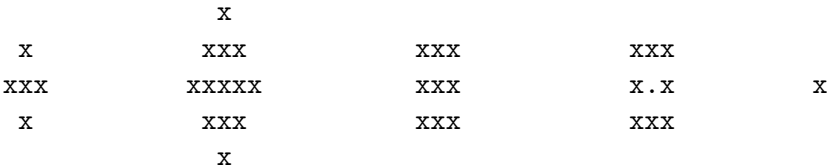


10593 Kites

The season of flying kites is well ahead. So what? Let us make an inventory for kites. We are given a square shaped sheet of paper. But many parts of this are already porous. Your challenge here is to count the total number of ways to cut a kite of any size from this sheet. By the way, the kite itself can't be porous :-) AND ...it must be either square shaped or diamond shaped.



In the above figure first three are valid kites but not next two.

Input

Input contains an integer n ($n \leq 500$), which is the size of the sheet. Then follows n lines each of which has n characters ('x' or '.'). Here the dotted parts resemble the porous parts of the sheet. Input is terminated by *end of file*.

Output

Output is very simple. Only print an *integer* according to the problem statement for each test case in a new line.

Sample Input

```

4
 .xx.
xxxxx
 .xx.
 .x..
3
xxx
xxx
xxx
  
```

Sample Output

```

4
6
  
```