Problem A. Another Dimension

In a parallel world (Dimension C-594) the IUT (Isfahan University of Technology) computer engineering students are holding an ICPC contest this week. Since there is no pandemic in Dimension C-594, they are holding the contest at the computer engineering department of the university. Now the time is up and the contestants have gone for lunch. Moein, who is one of the event organizers, decided to put a large screen on top of the department lobby so that everyone can see the winner's name coming from lunch. Unfortunately, the screen is broken and it shuffles the characters of the name of the winner. There are n contestants and he needs to know how many of them may have won the prize. Since he is the former chairperson of CESSA he is very busy. Help him calculate the number.

Input

The first line of input is the string on the screen.

The second line of input consists of one non-negative integer n — The number of contestants.

$$0 \leq n \leq 10^5$$

The next following n lines describe the names of the contestants. The names include lowercase and uppercase English letters containing no space or any other special characters. It is guaranteed that the sum of the length of contestants' names and the length of the string on the screen do not exceed 10^5. The answers are case-sensitive.

Output

In the only line of output print the number of contestants who may have won the IUT ICPC prize.

Examples

test	answer
madaMmho 5 Mohammad mohammad Ali Mahdi mohamMad	2
madaMmho 0	0