Choice

Description

HH, the lucky programmer, is facing the final exam of ACM (Advanced Computer Magic). The final exam contains many multiple choice questions. Unlike some boring exam has only 4 choices from A to D, we have 26 choices from A to Z for each question in the final exam of ACM!

The strategy of HH is very simple. He will pick a lucky choice for the first question, then select the next choice for the second question, and so on. For example, if there are 5 questions in the exam, his answer may be YZABC.

As you know, HH is a lucky boy. He will always pick the optimal choice among his strategy. For example, if the correct answer is BADEF, HH will answer BCDEF instead of ABCDE. Now you are given the correct answer for each question, how many questions will HH answer correctly?

Input

The first line contains an integer T indicating the total number of test cases. Each test case contains one line with a string s denoting the correct answer of each question from first to last.

- $1 \le T \le 1000$
- $1 \le |s| \le 5 \times 10^6$
- s contains only uppercase letters.
- There are at most 10 test cases with |s| > 1000.

Output

For each test case, please output the number of questions will HH answer correctly in one line.

Sample Input

Sample Output

2	2
ZEBRA	6
THEOLITCKEROWNEDX ILIMPSOVERTHEL AZYDOG	

Hint

The size of input file is about 50MB.