



Problem D Love Power Plant

Time limit: 1 second

Memory limit: 512 megabytes

Problem Description

A love power plant can generate a lot of energy. It is the cleanest power generator ever invented in the history. A love fuel stick is a string consisting of many L's, O's, V's, and E's. Love power plants generate power by consuming love fuel sticks as follows.

1. Find a subsequence (L,O,V,E) of the fuel stick, then remove it from the fuel stick to generate one gigawatt power.
2. If the fuel stick still has a subsequence (L,O,V,E), then go to the previous step.

For example, LLEOVEOLOVE can generate at most two gigawatts power by the following steps.

1. The power plant remove the last four characters. This changes the fuel stick to LLEOVEO.
2. The power plant remove the 2nd, 4th, 5th, 6th characters. This change the fuel stick to LEO.

The government hires the best people to operate love power plants, so all fuel stick can generate as much energy as possible. Please write a program to determine how many gigawatts can be generated by a given fuel stick.

Input Format

The first line of the input contains a positive integer T indicating the number of test cases. Each test case is a line containing a love fuel stick.

You may assume:

- $1 \leq T \leq 100$
- All fuel stick are no longer than 100000.

Output Format

For each test case, output an integer P where the coressponding fuel stick can generate P gigawatts power.

Sample Input

```
2
LOVE
LLEOVEOLOVE
```

Sample Output

```
1
2
```