B. Beautiful word

Description

Lanran has a word with n lowercase letters. To make this word beautiful, Lanran can change some letters into uppercase. Note that if Lanran change x to X, all x in the word will become X. He thinks that two adjacent letters can provide 1 beauty if one of them is lowercase letter and the other one is uppercase latter and both of them are consonants(English letters except a,e,i,o,u). Now Lanran wants to know what the maximum beauty is.

Input format

The first line contains one integer $T(1 \leq T \leq 10)$, indicates the number of testcases.

For each test case, there is only one line contains one string $s(1 \le |s| \le 10~000)$ with only lowercase letters.

Output format

Output one integer per line, indicating the maximum beauty.

Sample input

2 lanranisthebest

consonants

Sample output

4

2

Limitations & Hints

1 second for each test case. The memory limit is 256MB.

For 60% of the test cases, $1 \leq |s| \leq 100$ letters between m and z will not appear.

For 100% of the test cases, $1 \leq |s| \leq 10~000$ and all letters may appear.

Hint

The calculation speed of our OJ is very fast. :)