Problem H. Dobra

Time Limit	1000 ms
Mem Limit	1048576 kB
OS	Linux

Lea runs into a lot of words in her life. A lot of them she finds unpleasant. To compensate for that she started making up pleasant words. Lea makes up new words by writing a nice looking string of characters on a piece of paper. She than erases a few of the most nasty looking characters and replaces them with underscores '_'. After that she tries to replace the underscores with more acceptable characters trying to form a pleasant word.

Lea considers words pleasant if they do not contain 3 sequential vowels, 3 sequential consonants and contain at least one letter 'L'.

In Croatian, the vowels are the letters A, E, I, O, and U only. All other letters are consonants.

Input

The first and only line of input contains a string of characters, at most 100. The string contains only of uppercase English letters and '_' characters. There will be at most 10 '_' characters.

Output

The first and only line of output should contain a single integer – the total number of pleasant words that can be formed by substituting underscores with uppercase letters of the English alphabet.

Sample 1

Input	Output
L_V	5

Sample 2

Input	Output
V__K	10

Sample 3

Input	Output
JA_BU_K_A	485

Input	Output
JA_BU_K_A	485