Vowels

Kareem has a string S of length L, He wants to count the vowels and consonants in that string.

Help Kareem in his task.

Input

The first line contains one integer T – the number of test cases (1 <= T <= 100), then follows T lines, each line contains a string S (1 <= |S| <= 1000) consists of lower case, and upper case English letters, and possibly symbols and numbers.

Output

For each test case, output one line contains two integers A and B – the number of vowels and the number of consonants.

Example

Input:
2
ABCDE123*^%
(Y)

Output:
2 3
1 0

Note:

Letters 'Y' and 'y' are considered vowels.