



PROBLEM 3 – VOWELS FREQUENCIES

The English alphabet consists of 26 letters. Five of these (a, e, i, o and u) are classified as vowels, the remaining 21 as consonants. Almost every English word contains at least one vowel (“rhythm” is one of the few exceptions).

In this problem you will be given a number of pieces of English text. Your task is to determine the frequency of each vowel that is found in the piece, and to display the answers sorted by frequency, highest frequency first. Where two vowels are equally frequent, they are to be displayed in alphabetical order.

As you can see from the examples below, upper case and lower case letters are considered to be the same letter in this problem. Use lower case in your output. As you can see from the second example, a frequency of zero must still be displayed.

INPUT FORMAT

Each piece of text to be analysed is on a separate line of the input file. Each line has at most 200 characters. A single # on a line indicates the end of input.

SAMPLE INPUT:

```
This piece of text was written in the city of Auckland.  
ACM Programming Contest.  
#
```

OUTPUT FORMAT

Output for a problem must be on a single line. Each vowel must be output in lower case, followed by a colon, followed by the frequency of that vowel. There must be one space before the next letter, and a dot at the end.

SAMPLE OUTPUT:

```
e:5 i:5 a:3 o:2 u:1.  
a:2 o:2 e:1 i:1 u:0.
```