Word Frequency

You are given a list of words. Some of words may appear multiple times. Then, you are given some questions. Each question is also a word. Your task is to reply how many times the question-word appearing in the above list.

Input

The input contains two parts. The first part is a list of words. These words are appearing in separate lines. The first part is terminated by a line containing a single character '#'. It then follows with the question-words line by line.

Output

For each question, output the question-word first, and then an integer denoting the frequency. The question-word and the frequency are separated by a space.

Sample Input

```
one
little
two
little
three
little
Indians
#
one
little
four
Indians
indians
```

Sample Output

```
one 1
little 3
four 0
Indians 1
indians 0
```