

Try to complete

Problem Statement :

You are given hundreds of thousands of words from a book.

For each query you are given a string S. Find the most occurring word in the book with S as prefix.

Input :

The first line consists of an integer n, the number of words in the text book. The next n lines consists of the words in the book. The next line consists of an integer q, the number of queries. Next q lines consists a string S.

Output:

For each query String S, print the most occurring word in the book with S as prefix along with the number of occurrences of that word. **If there are many such words, print the lexicographically smallest word. If there is no such word, print -1.**

Input Constraints :

$1 \leq n \leq 5 \cdot 10^5$

$1 \leq q \leq 10^5$

$1 \leq \text{word length} \leq 10$

All the characters in the word are small letters of English alphabet.

Time Limit :

3 seconds

Sample Input :

10

apple

banana

orange

applet

banana
oriental
orange
oriental
applet
bangalore
8
ban
bang
app
or
oriental
apple
hobbits
oranges

Sample Output :

banana 2
bangalore 1
applet 2
orange 2
oriental 2
applet 2
-1
-1

Problem source : Inspired from autocomplete feature.