

Problem Statement

DefaultDict is a container in the collections class of Python. It is almost the same as the usual dictionary (dict) container but with one difference. The value fields' data-type is specified upon initialization.

A basic snippet showing the usage follows:

```
from collections import defaultdict
d = defaultdict(list)
d['python'].append("awesome")
d['something-else'].append("not relevant")
d['python'].append("language")
for i in d.items():
    print i
```

This prints:

```
('python', ['awesome', 'language'])
('something-else', ['not relevant'])
```

In this challenge, you will be given 2 integers (n and m) and n words which might repeat, say they belong to a word group A . Then you'll be given m other words belonging to word group B . For each of these m words, you have to check whether the word has appeared in A or not. If it has then you have to print indices of all of its occurrences. If it has not then just print -1 .

Constraints

$$1 \leq n \leq 10000$$

$$1 \leq m \leq 100$$

$$1 \leq \text{length of each word in the input} \leq 100$$

Input Format

The first line contains n and m .

The next n lines contain the words belonging to A .

The next m lines contain the words belonging to B .

Output Format

Output m lines.

The i^{th} line should contain the 1 indexed positions of occurrences of the i^{th} word, separated by spaces, of the last m lines of the input.

Sample Input

```
5 2
a
a
b
a
b
a
b
```

Sample Output

```
1 2 4
3 5
```

Explanation

'a' appeared 3 times in positions 1, 2 and 4. 'b' appeared 2 times in position 3 and 5. Hence the output. For the same word group A , had the appearances of 'c' been asked about in the word group B , you would have had to print -1 instead.