

Problem Statement

The *defaultdict* tool is a container in the collections class of Python. It's similar to the usual dictionary (*dict*) container, but it has one difference: The value fields' data type is specified upon initialization.

For example:

```
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 . There are n words, which might repeat, in word group A . There are m words belonging to word group B . For each m words, check whether the word has appeared in group A or not. Print the indices of each occurrence of m in group A . If it does not appear, 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 integers, n and m separated by a space.

The next n lines contains the words belonging to group A .

The next m lines contains the words belonging to group B .

Output Format

Output m lines.

The i^{th} line should contain the 1-indexed positions of the occurrences of the i^{th} word separated by spaces.

Sample Input

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

Sample Output

```
1 2 4
```

Explanation

'a' appeared 3 times in positions 1, 2 and 4.

'b' appeared 2 times in positions 3 and 5.

In the sample problem, if 'c' also appeared in word group B , you would print -1 .