

DefaultDict Tutorial

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

- $1 \leq n \leq 10000$
- $1 \leq m \leq 100$
- $1 \leq \textit{length of each word in the input} \leq 100$

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 *ith* line should contain the 1-indexed positions of the occurrences of the *ith* word separated by spaces.

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 positions **3** and **5**.

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