Atacan plays Hide And Seek

Problem

Submissions

Discussion Coming Soon

Atacan and his M friends are playing hide and seek. In this game, Atacan is the seeker. And he wants to find all of his friends. But he doesn't want to go away from his place. He knows that his friends will always hide behind the wall that is equal in height to them. There are N walls which they can hide behind them.

Your task is to help Atacan.

Input Format

The first line contains two integers N and M. The second line contains N integers separated by spaces, denoting heights of walls(in non-decreasing order). The third line contains M integers separated by spaces, denoting heights of Atacan's friends.

Output Format

The output should contain M lines. Each line should be -1 or j. For every i_{th} friend,

- if Atacan knows i's exact location, print $j-$ the index of the wall which his friend is hiding.
- if Atacan doesn't know the exact location of i or friend i can't hide, print -1.

Constraints

$$1 \leq N, M \leq 10^5$$

$$1 \leq every\ height \leq 10^9$$

Sample Input 1

```
4 3
1 2 2 3
1 2 4
```

Sample Output 1

```
1
-1
-1
```

C++ (GCC 9.2.0) Bright Memory Limit (kB) : 256000 Time Limit (s) : 1

```
#include <bits/stdc++.h>

using namespace std;
int main(){
    int N, M;
    cin >> N >> M;
    vector<int> walls(N);
    vector<int> friends(M);
    unordered_map<int, int> mp;
    unordered_map<int, int> index;
    for(int i = 0; i < N; i++){
        cin >> walls[i];
        index[walls[i]] = i;
        mp[walls[i]]++;

    }
    for(int i = 0; i < M; i++){
        cin >> friends[i];
    }
    for(int i = 0; i < M; i++){
        if(mp[friends[i]] == 1)
            cout << index[friends[i]] + 1<< "\n";
        else
            cout << -1 << "\n";
    }
    return 0;
}
```

Upload File

□ Test against custom test case

Run Code

Submit

✓ Sample Test Case 0

Accepted

Input(stdin)

```
4 3
1 2 2 3
1 2 4

```

Output(stdin)

```
1
-1
-1

```

Expected Output

```
1
-1
-1

```