Teacher and his Students

Problem	Submissions	Leaderboard

Teacher is standing at the door of his classroom. There are currently N students in the class, i'th student got A_i candies.There are still M more students to come. At every instant, a student enters the class and wishes to be seated with a student who has exactly the same number of candies. For each student, Teacher shouts YES if such a student is found, NO otherwise. To help the Teacher perform his task, you are required to write a program which evaluates whether each new student who wants to enter the class has a matching student with the same number of candies.

Input Format

First line contains an integer T which indicates the number of test cases to follow.

First line of each test case contains two space-separated integers N and M. N is the number of students already in class and M is the number of students who want to enter to the class.

Second line of each test case contains $N + M$ space-separated integers, First N space-separated integers indicate the candies of each student who are already in class and the remaining M space-separated integers indicate the number of candies each student who wants to enter the class have.

Constraints

$1 \le T \le 10$
$1 \le N, M \le 10^5$
$0 \le A_i \le 10^{12}$

Output Format

For each test case, output M new line, Teacher's answer to the M students.Print "YES" (without the quotes) or "NO" (without the quotes) pertaining to the Teacher's answer.

Sample Input 0

```
1
2 3
3 2 9 11 2
```

Sample Output 0

```
NO
NO
YES
```

Explanation 0

Initially students with 3 and 2 candies are in the class.
A student with 9 candies enters, No student with 9 candies in class. Hence, "NO"
A student with 11 candies enters, No student with 11 candies in class. Hence, "NO"
A student with 2 candies enters, Student with 2 candies found in class. Hence, "YES"

Sample Input 1

```
1
5 4
1 5 2 1 2 3 3 5 2
```

Sample Output 1

```
NO
YES
YES
YES
```

Explanation 1

Intially five students in the class
A student with 3 candies enters, No student with 3 candies in class. Hence, "NO"
A student with 3 candies enters, student with 3 candies found in class. Hence, "YES"
A student with 5 candies enters, student with 5 candies found in class. Hence, "YES"
A student with 2 candies enters, student with 2 candies found in class. Hence, "YES"

Sample Input 2

```
2
8 3
5 2 5 5 3 4 5 5 2 2 4
7 2
3 2 5 3 1 3 3 3 5
```

Sample Output 2

```
YES
YES
YES
YES
YES
```

Current Buffer (saved locally, editable)   ⑂ ⏱   C++14

```cpp
#include <cmath>
#include <cstdio>
#include <vector>
#include <iostream>
#include <algorithm>
using namespace std;


int main() {
    /* Enter your code here. Read input from STDIN. Print output to STDOUT */
    return 0;
}
```

Line: 1 Col: 1

☐ Test against custom input

Run Code

Submit Code