Sets-STL ☆

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Sets are a part of the C++ STL. Sets are containers that store unique elements following a specific order. Here are some of the frequently used member functions of sets:

- Declaration:

```
set<int>s; //Creates a set of integers.
```

- Size:

```
int length=s.size(); //Gives the size of the set.
```

- Insert:

```
s.insert(x); //Inserts an integer x into the set s.
```

- Erasing an element:

```
s.erase(val); //Erases an integer val from the set s.
```

- Finding an element:

```
set<int>::iterator itr=s.find(val); //Gives the iterator to the element val if it is found othe
Ex: set<int>::iterator itr=s.find(100); //If 100 is not present then it==s.end().
```

To know more about sets click Here. Coming to the problem, you will be given Q queries. Each query is of one of the following three types:

$1\ x$: Add an element x to the set.

$2\ x$: Delete an element x from the set. (If the number x is not present in the set, then do nothing).

$3\ x$: If the number x is present in the set, then print "Yes"(without quotes) else print "No"(without quotes).

Input Format

The first line of the input contains Q where Q is the number of queries. The next Q lines contain 1 query each. Each query consists of two integers y and x where y is the type of the query and x is an integer.

Constraints

$1 <= Q <= 10^5$

$1 <= y <= 3$

$1 <= x <= 10^9$

Output Format

For queries of type 3 print "Yes"(without quotes) if the number x is present in the set and if the number is not present, then print "No"(without quotes).

Each query of type 3 should be printed in a new line.

Sample Input

```
8
1 9
1 6
1 10
1 4
3 6
3 14
2 6
3 6
```

Sample Output

```
Yes
No
No
```

Current Buffer (saved locally, editable) C++

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

```

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

    int Q;
    scanf("%d", &Q);
    set<int>s;

    while(Q--) {

        int x,y;
        scanf("%d %d",&y, &x);

        if(y == 1) {
            s.insert(x);

        }
        else if(y == 2) {

            if(s.find(x) != s.end()) {
                s.erase(x);
            }

        }
        else if(y == 3) {
            if(s.find(x) != s.end()) {
                cout << "Yes" << endl;
            } else {
                cout << "No" << endl;
            }
        }

    }

    return 0;
}
```

Line: 1 Col: 1

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