Sets-STL



Problem Statement

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

• Declaration:

set<int>st; //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 otherwise returns s.end() . Ex: set < int > :: iterator itr = s.find(100); //lf 100 is not present then it = s.end().

To know more about sets click Here. Coming to the problem, you will be give Q queries. Each query is of one of the 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

$$1 <= Q <= 10^5$$

$$1 <= y <= 3$$

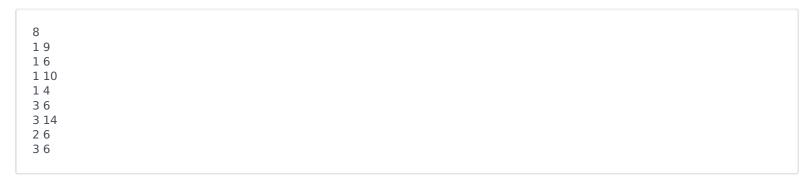
$$1 <= x <= 10^9$$

Output Format

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

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

Sample Input



Sample Output

Yes	
Yes No No	
No	