Headphones Fachche

Statement:
The first-year students absolutely love their headphones. They wear them everywhere; on the roads, in the labs and maybe in the bathrooms as well. All the students started wearing headphones of various sizes in the lab and 2G sir is quite disappointed by this. He decides to teach a group of students only if that group is “nice”. A group of students is nice if the absolute difference between the size of the smallest and largest headphones is strictly greater than the number of students in the group. For the sake of this problem assume that all students sit in a single row. There are two things that can happen.
A student may change his headphones.
2G sir may ask if he can teach the group of students from **i^{th}** index to **j^{th}**
You are supposed to simulate these events in order.

Input format:
First line contains **N** (number of students) and **M** (number of operations)
Second line contains **N** space separated integers, which represent the size of headphones everyone is wearing at the beginning of the class. (Let’s call this array **A**)
M lines follow. Each line is either
r i x which means the **i^{th}** students removes his current headphones and wears a new one of size **x**. Do not print anything in this case.
OR
t i j where you should report if the student set **A[i…j]** is nice or not. Print **Yes** if it is, **No** otherwise.

Constraints:
1 <= N, M <= 10^5
0 <= A[i], x <= 10^9
1 <= i <= N
1 <= a <= b <= N

Sample Input:
5 5
1 3 5 7 9
t 2 5
t 2 3
r 5 6
t 1 5
t 2 5

Sample Output:
Yes
No
Yes
No