Problem B
Transportation System Renovation

Time Limit: 2 second
Memory Limit: 512 megabytes

Ho Chi Minh city is the largest and most populated city in Vietnam. The city has n junctions (numbered from 1 to n), connected by m bidirectional roads (numbered from 1 to m). Each road connects two junctions in the city, and each road has a certain carrying capacity. A truck with weight w can travel on a road with a capacity c if $w \leq c$.

The city is preparing an renovation plan on the transportation system. During the renovation process, there might be an increase or decrease in the capacity of some roads.

You are given the current transportation system and q queries, each query is either:

- $C\ i\ x$: Change the capacity of the road i to x.
- $S\ a\ b\ w$: Check if a truck with weight w can travel from a to b where a and b are junctions.

Input

Input starts with 3 integers n, m and q ($1 \leq n \leq 1\,000, 1 \leq m \leq 100\,000$).

The i^{th} line of the next m lines contains 3 integers $u\ v\ c_i$ indicating there is a road with capacity c_i from u to v.

The next q lines contain q queries in the above format. It is guaranteed that the capacity of the roads never exceeds 10^9 and there should be no more than 2000 queries of type C.

Output

For each query of type S, you should print the answer YES or NO.

Sample Input	Sample Output
3 4 6 1 2 3 2 3 3 2 1 1 1 2 1 S 1 2 4 S 2 3 2 C 1 4 S 1 2 4 C 2 1 S 2 3 2	NO YES YES NO