(Adv.) Competitive Programming

Submit until end of contest, via the judge interface



Problem: sea-level (1 second timelimit)

You are the governor of a small island state in the Pacific. With the sea level rising ever higher due to global warming, you are worried that soon your island might be split into multiple smaller ones.

To get ahead of this problem you had a map created containing every road on the island. For every road you also had measured, how many meters its lowest point is above the current sea level. Now you are developing several emergency plans, depending on how high the water will rise. As a part of this, you constantly check on the map whether you can still travel from one town to another at a specific water level.

Input The first line contains t, r and q ($1 \le t, r, q \le 10^5$), the number of towns, roads and queries. Each of the next r lines contain a road in the form of a, b and h ($1 \le a, b \le i, 0 \le h \le 2000$), the start and end town as well as its height at the lowest point above the current water level. The road becomes unusable if the sea level rises by more than h meters. After that follow q lines each containing a query a, b and b ($1 \le a, b \le i, 0 \le b \le 0.00$).

Output For each query, output a line containing YES if you can get from town a to town b if the water level rises by b meters, and NO otherwise.

Sample input

Sample output

3 2 2	NO
1 2 20	YES
2 2 00	
2 3 80	
1 2 50	
1 3 50	
1 2 20	
1 3 20	

_	_					
5	5	3				
1	3	25				
4	1	100				
2	4	30				
2	1	50				
2	3	70				
1	4	100				
1	3	60				
3	4	40				

YES			
NO			
YES			