

E. Envy

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

For a connected undirected weighted graph G , MST (minimum spanning tree) is a subgraph of G that contains all of G 's vertices, is a tree, and sum of its edges is minimum possible.

You are given a graph G . If you run a MST algorithm on graph it would give you only one MST and it causes other edges to become jealous. You are given some queries, each query contains a set of edges of graph G , and you should determine whether there is a MST containing all these edges or not.

Input

The first line contains two integers n, m ($2 \leq n, m \leq 5 \cdot 10^5, n - 1 \leq m$) — the number of vertices and edges in the graph and the number of queries.

The i -th of the next m lines contains three integers u_i, v_i, w_i ($u_i \neq v_i, 1 \leq w_i \leq 5 \cdot 10^5$) — the endpoints and weight of the i -th edge. There can be more than one edges between two vertices. It's guaranteed that the given graph is connected.

The next line contains a single integer q ($1 \leq q \leq 5 \cdot 10^5$) — the number of queries.

q lines follow, the i -th of them contains the i -th query. It starts with an integer k_i ($1 \leq k_i \leq n - 1$) — the size of edges subset and continues with k_i distinct space-separated integers from 1 to m — the indices of the edges. It is guaranteed that the sum of k_i for $1 \leq i \leq q$ does not exceed $5 \cdot 10^5$.

Output

For each query you should print "YES" (without quotes) if there's a MST containing these edges and "NO" (of course without quotes again) otherwise.

Example

input
5 7 1 2 2 1 3 2 2 3 1 2 4 1 3 4 1 3 5 2 4 5 2 4 2 3 4 3 3 4 5 2 1 7 2 1 2
output
YES NO YES NO

Note

This is the graph of sample:

Weight of minimum spanning tree on this graph is 6.

MST with edges (1, 3, 4, 6), contains all of edges from the first query, so answer on the first query is "YES".

Edges from the second query form a cycle of length 3, so there is no spanning tree including these three edges. Thus, answer is "NO".