

Problem G

Friendship Game

Time limit: 1.5 second
Memory: 1024 megabytes

Problem Description

On this beautiful day, with no moon, no stars, no clouds, no rain, neither hot nor cool, nor cold, and not stuffy either, *Nhat Tang* has decided to create a friendship game. The game is as follows: "*Nhat Tang* will create a list of players in the main group consisting of N people, numbered from 1 to N , and a group of outsiders who will guess and provide answers. If the outsiders answer all his questions correctly, both groups will be rewarded by him.

There are M time points; at the i^{th} time point ($0 < i \leq M$), he can perform two actions:

1. Merge all players from team x into team y .
2. Ask whether player x is on the same team as player y .

The game may seem simple, but as more and more friends want to join, the number of players has reached up to *a billion*, making it difficult for the remaining group to provide answers when *Nhat Tang* asks. So, if you want to join this game and earn praise, solve this problem!

Input:

- The first line: Two positive integers N and M (where $N \leq 10^9$ and $M \leq 10^6$).
- The next M lines each contain three integers q, x, y (where $0 < x, y \leq N$).
 - For $q = 0$: Perform the first action (merge teams).
 - For $q = 1$: Perform the second action (check team membership).

Output:

- For each operation where $q = 1$, print **YES** if they are on the same team, otherwise print **NO**.

Example:

| INPUT | OUTPUT |
|-------|--------|
| 5 5 | NO |
| 0 2 3 | YES |
| 0 1 5 | YES |
| 1 4 2 | |
| 1 3 2 | |
| 1 4 4 | |