Highway

Time limit: 2 sec.
Memory limit: 512MB

Description

We are going to build some highways! Initially, there are n
cities and no highways. The cities are numbered from 1 to n.
Then, you have to answer to q queries. There are 2 types of
queries, such as following.

- Type 1: Given two integers, x and y, build a highway
  connecting city x and city y.

- Type 2: Given two integers, x and y, print whether it is
  possible to get from city x to city y using highways. Print
  "Yes" if it is possible, and print "No" otherwise.

Input

The first line contains two integers, n and q. ($1 \leq n,q \leq 100000$)

The i-th line of the next q line consists of the following:

- The first integer of the line is t_i, the type of the i-
  th query. (t_i = 1 or 2).

- The next two integers of the line are x_i and y_i, the city
  number of i-th query. (1 <= x_i,y_i <= n, $x_i \neq y_i$)

It is guaranteed that there is at least one query of type 2.

Output

For every query of type 3, print the appropriate string as stated

on the description section, in a new line.

Sample I/O

Input(s)	Output(s)
3 6	No
2 1 3	Yes
1 1 2	No
2 1 2	Yes
2 1 3	
1 2 3	
2 1 3	