Problem E. Easy Compare-and-Set

Time limit: 2 seconds
Memory limit: 512 megabytes

Let us define "Compare-and-Set" operation for a global variable v. The operation checks if the variable is equal to a. If that's true, the variable value changes to b and the operation succeeds. Otherwise, the variable doesn't change and the operation fails. Let us denote the operation as $\mathrm{CAS}(a, b)$.

Imagine that you are given a list of such operations $\mathrm{CAS}(a_1, b_1), \ldots, \mathrm{CAS}(a_n, b_n)$. Also, you are given an initial value for the variable, c, and a list of wishes $w_1, \ldots w_n$, where w_i tells whether the operation $\mathrm{CAS}(a_i, b_i)$ should be successful. Your task is to determine the order of operations execution so that all the wishes are satisfied.

Input

The first line contains two integers n and c ($1 \le n \le 10^5$; $1 \le c \le 10^9$) — the number of operations and the initial value of the variable.

Each of the next n lines contains three integers a_i, b_i, w_i ($1 \le a_i, b_i \le 10^9$; $0 \le w_i \le 1$), denoting $\mathrm{CAS}(a_i, b_i)$ operation that you wish to be successful if $w_i = 1$ and unsuccessful if $w_i = 0$. The operations are numbered from 1 to n in order of input.

Output

If no correct order of operations exists, output a single word "`No`".

Otherwise, output a word "`Yes`" followed by n distinct integers $p_1, p_2, \ldots p_n$ ($1 \le p_i \le n$), meaning that operation p_1 should be executed first, then operation p_2, and so on. If there are several possible orders, output any of them.

Examples

standard input	standard output
4 1 1 2 0 1 2 1 2 3 1 3 4 0	Yes 4 2 1 3
3 1 1 2 1 1 2 1 1 2 0	No