

## B. Interesting Array

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

We'll call an array of  $n$  non-negative integers  $a[1], a[2], \dots, a[n]$  *interesting*, if it meets  $m$  constraints. The  $i$ -th of the  $m$  constraints consists of three integers  $l_i, r_i, q_i$  ( $1 \leq l_i \leq r_i \leq n$ ) meaning that value  $a[l_i] \& a[l_i + 1] \& \dots \& a[r_i]$  should be equal to  $q_i$ .

Your task is to find any *interesting* array of  $n$  elements or state that such array doesn't exist.

Expression  $x \& y$  means the bitwise AND of numbers  $x$  and  $y$ . In programming languages C++, Java and Python this operation is represented as "&", in Pascal — as "and".

### Input

The first line contains two integers  $n, m$  ( $1 \leq n \leq 10^5, 1 \leq m \leq 10^5$ ) — the number of elements in the array and the number of limits.

Each of the next  $m$  lines contains three integers  $l_i, r_i, q_i$  ( $1 \leq l_i \leq r_i \leq n, 0 \leq q_i < 2^{30}$ ) describing the  $i$ -th limit.

### Output

If the *interesting* array exists, in the first line print "YES" (without the quotes) and in the second line print  $n$  integers  $a[1], a[2], \dots, a[n]$  ( $0 \leq a[i] < 2^{30}$ ) describing the *interesting* array. If there are multiple answers, print any of them.

If the *interesting* array doesn't exist, print "NO" (without the quotes) in the single line.

### Examples

<b>input</b>	<a href="#">Copy</a>
3 1 1 3 3	
<b>output</b>	<a href="#">Copy</a>
YES 3 3 3	

  

<b>input</b>	<a href="#">Copy</a>
3 2 1 3 3 1 3 2	
<b>output</b>	<a href="#">Copy</a>
NO	