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# Problem A. Around the World

Input file:            **standard input**  
Output file:           **standard output**  
Time limit:            1 second  
Memory limit:         1024 megabytes

In ICPCCamp, there are  $n$  cities and  $(n - 1)$  (bidirectional) roads between cities. The  $i$ -th road is between the  $a_i$ -th and  $b_i$ -th cities. It is guaranteed that cities are connected.

Recently, there are  $2 \times c_i - 1$  new roads built between the  $a_i$ -th and  $b_i$ -th cities. Bobo soon comes up with an idea to travel around the world! He plans to start in city 1 and returns to city 1 after traveling along every road exactly once.

It is clear that Bobo has many plans to choose from. He would like to find out the number of different plans, modulo  $(10^9 + 7)$ .

Note that two plans  $A$  and  $B$  are considered different only if there exists an  $i$  where the  $i$ -th traveled road in plan  $A$  is different from the  $i$ -th road in plan  $B$ .

## Input

The first line contains an integer  $n$  ( $2 \leq n \leq 10^5$ ).

The  $i$ -th of the following  $(n - 1)$  lines contains 3 integers  $a_i, b_i, c_i$  ( $1 \leq a_i, b_i \leq n, c_i \geq 1, c_1 + c_2 + \dots + c_{n-1} \leq 10^6$ ).

## Output

An integer denotes the number of plans modulo  $(10^9 + 7)$ .

## Examples

standard input	standard output
3 1 2 1 2 3 1	4
3 1 2 1 1 3 2	144