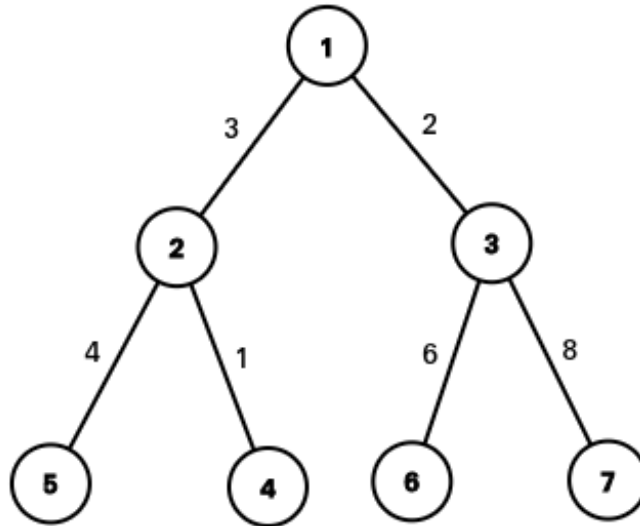


Simple Path

You will be given a weighted rooted tree, where root is node 1. For each subtree of that tree, you will have to compute the summation of lengths of all possible simple paths present in that subtree. Eventually you need to print the summation of those values modulo **100000007**.

Image of the tree in the first sample is given below.



Input Specification

First line of input will contain an integer T ($1 \leq T \leq 10$) denoting the number of test cases. Each test case will begin with an integer N ($1 \leq N \leq 100000$), indicating number of nodes. The following $N-1$ lines will have three integers each, U ($1 \leq U \leq N$), V ($1 \leq V \leq N$), W ($1 \leq W \leq 100000000$), which denotes that there is an edge in the tree from node U to node V having W weight.

Input File is large. Use fast I/O methods.

Output Specification

For each test case, print the case number then print the answer to the problem modulo **100000007** in separate lines.

Sample I/O

| Sample Input | Sample Output |
|--------------|---------------|
| 2 | |
| 7 | |
| 1 2 3 | |

| | |
|-------|-------------|
| 1 3 2 | |
| 2 4 1 | |
| 2 5 4 | |
| 3 6 6 | Case 1: 212 |
| 3 7 8 | Case 2: 109 |
| 6 | |
| 1 2 3 | |
| 1 3 2 | |
| 1 4 4 | |
| 3 5 7 | |
| 3 6 1 | |

Explanation of Sample I/O

Explanation of the 1st sample:

Summation of lengths of all possible sample paths for each subtree is given below:

1: 174

2: 10

3: 28

4: 0

5: 0

6: 0

7: 0

Explanation of the 2nd sample:

Summation of lengths of all possible sample paths for each subtree is given below:

1: 93

2: 0

3: 16

4: 0

5: 0

6: 0