

Dexter n Dee Dee

Time Limit – 1 seconds

Dexter is Dee Dee's little brother. She loves "playing with" him but she destroys things in his lab and drives him crazy. It may seem that Dee Dee is nothing but a pure idiot who just annoys Dexter all the time, but truthfully deep down of her candy canes and lollipop glitter heart, she loves Dexter and thinks he's awesome. In fact, to her, Dexter is her favorite thing in the whole entire world.

Today, Dexter is experimenting on a tree. It is a rooted tree consisting of n nodes numbered from 1 to n . The root of the tree is one. Each node has a color, white or black. Now he is trying to find how many nodes are there who has at least one black node as sibling. Two nodes, a and b , are called siblings, if they share the same parent. The color of the root is always white. As it is bit hard for him to count that thing, he asked Dee Dee to help, but she could not help him in this task either. So, today Dexter needs your help.

Input :

Input starts with an integer T (≤ 100), denoting the number of test cases.

Each case starts with an integer n ($2 \leq n \leq 100$), the number of nodes in the tree. Each of the next $n - 1$ lines will contain three integers U_i , P_i and C_i , where P_i denotes the parent of U_i and C_i denotes the color of U_i . If C_i is 0, the node is white. If C_i is 1, the node is black.

Output:

For each case, print the case number and the expected answer of the problem described. See the output format below.

Sample Input	Sample Output
2 3 2 1 1 3 1 0 3 2 1 1 3 1 1	Case 1: 1 Case 2: 2