## Problem Statement -

Harshit loves cookies . He goes to the kitchen each night and eats all the cookies. Frustated from this his mother decides to put a lock on the kitchen which can only be opened after solving a puzzle. Help Harshit in solving the following puzzle as he is your dear friend and is weak in maths.

Given a tree (always rooted at 0) with each node with an integer label in range [-100,100] ,check if it possible to reach each leaf node such that for each root to leaf path the absolute value of the sum of labels from root to that leaf node is a prime number. If possible then print “YES” , otherwise print “NO”.

**NOTE- Absolute value of x = |x| where | x| is defined as -** $$|x| = \begin{cases} x \text{ if } x \geq 0 \\ -x \text{ if } x < 0 \end{cases}$$

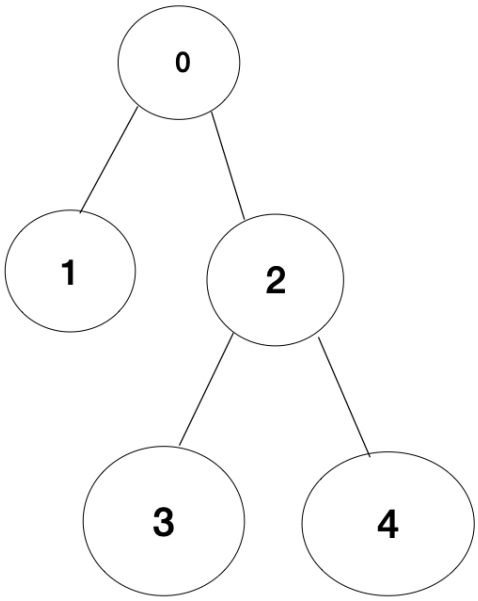
If answer is correct then the lock gets unlocked.

Example-

| Node | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| Label | 2 | 29 | -3 | 44 | 18 |

Path 0-1 : sum =31
Path 0-2-3 : sum = 43
Path 0-2-4 : sum = 17

since, every path sum is a prime no then
Output is “YES”




## Input :

The first line contains t ( 1<=t<=10 ) the no of test cases.
The second line contains an integer n ( 1<=n<=$10^4$ ) denoting the size of the tree.
The next n-1 lines contain two integers u,v ( 0<=u,v<n ) each, describing the i-th edge from u to v.
Last line contains n label for the nodes. ith label is of ith node.

## Output :

Print “YES” or “NO” for each test case on seperate lines.