Similar Pair

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You are given a tree where each node is labeled from 1 to n. How many similar pairs(S) are there in this tree?

A pair (A,B) is a similar pair if the following are true:

- node A is the ancestor of node B
- $abs(A - B) \leq T$

Input format:
The first line of the input contains two integers, n and T. This is followed by $n - 1$ lines, each containing two integers s_i and e_i where node s_i is a parent to node e_i.

Output format:
Output a single integer which denotes the number of similar pairs in the tree.

Constraints:
$1 \leq n \leq 100000$
$0 \leq T \leq n$
$1 \leq s_i, e_i \leq n$

Sample Input:

```
5 2
3 2
3 1
1 4
1 5
```

Sample Output:

```
4
```

Explanation:
The similar pairs are: (3, 2) (3, 1) (3, 4) (3, 5).

You can have a look at the tree image here

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Submissions: 2070
Max Score: 70
Difficulty: Advanced

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BASH

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