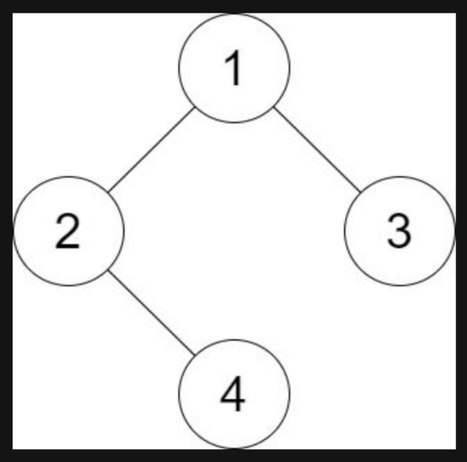
1530. Number of Good Leaf Nodes Pairs

Description

You are given the `root` of a binary tree and an integer `distance`. A pair of two different **leaf** nodes of a binary tree is said to be good if the length of **the shortest path** between them is less than or equal to `distance`.

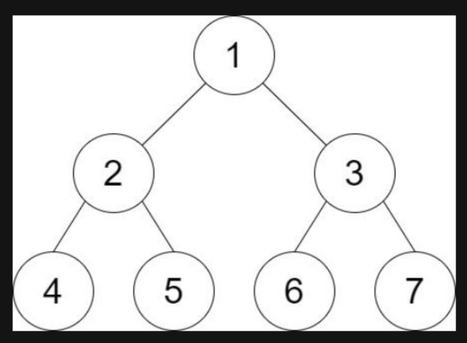
Return *the number of good leaf node pairs* in the tree.

Example 1:




```
Input: root = [1,2,3,null,4], distance = 3
Output: 1
Explanation: The leaf nodes of the tree are 3 and 4 and the length of the shortest path between them is 3. This is the only good pair.
```

Example 2:




```
Input: root = [1,2,3,4,5,6,7], distance = 3
Output: 2
Explanation: The good pairs are [4,5] and [6,7] with shortest path = 2. The pair [4,6] is not good because the length of ther shortest path between them is 4.
```

Example 3:

```
Input: root = [7,1,4,6,null,5,3,null,null,null,null,null,2], distance = 3
Output: 1
Explanation: The only good pair is [2,5].
```

Constraints:

- The number of nodes in the `tree` is in the range `[1, 2^10].`
- `1 <= Node.val <= 100`
- `1 <= distance <= 10`