1245. Tree Diameter Premium

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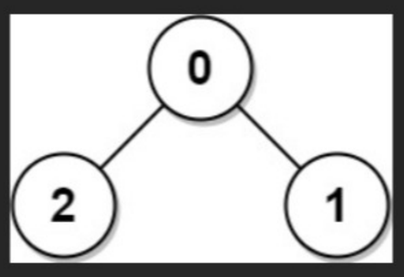
The **diameter** of a tree is **the number of edges** in the longest path in that tree.

There is an undirected tree of `n` nodes labeled from `0` to `n - 1`. You are given a 2D array `edges` where `edges.length == n - 1` and `edges[i] = [a_i, b_i]` indicates that there is an undirected edge between nodes `a_i` and `b_i` in the tree.

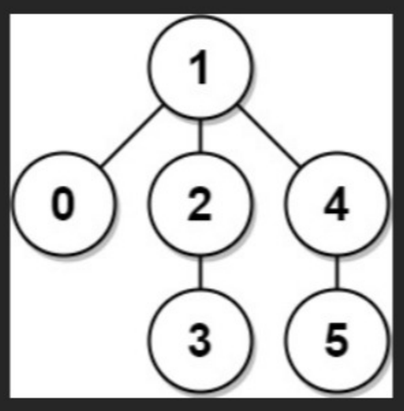
Return *the **diameter** of the tree*.

Example 1:




```
Input: edges = [[0,1],[0,2]]
Output: 2
Explanation: The longest path of the tree is the path 1 - 0 - 2.
```

Example 2:




```
Input: edges = [[0,1],[1,2],[2,3],[1,4],[4,5]]
Output: 4
Explanation: The longest path of the tree is the path 3 - 2 - 1 - 4 - 5.
```

Constraints:

- `n == edges.length + 1`
- `1 <= n <= 10^4`
- `0 <= a_i, b_i < n`
- `a_i != b_i`

Seen this question in a real interview before? 1/5

Yes No

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Companies

0 - 3 months

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Hint 1

Start at any node A and traverse the tree to find the furthest node from it, let's call it B.

Hint 2

Having found the furthest node B, traverse the tree from B to find the furthest node from it, lets call it C.

Hint 3

The distance between B and C is the tree diameter.

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