222. Count Complete Tree Nodes

Description

Given the `root` of a **complete** binary tree, return the number of the nodes in the tree.

According to **Wikipedia**, every level, except possibly the last, is completely filled in a complete binary tree, and all nodes in the last level are as far left as possible. It can have between `1` and `2`^{h} nodes inclusive at the last level `h`.

Design an algorithm that runs in less than `O(n)` time complexity.

Example 1:
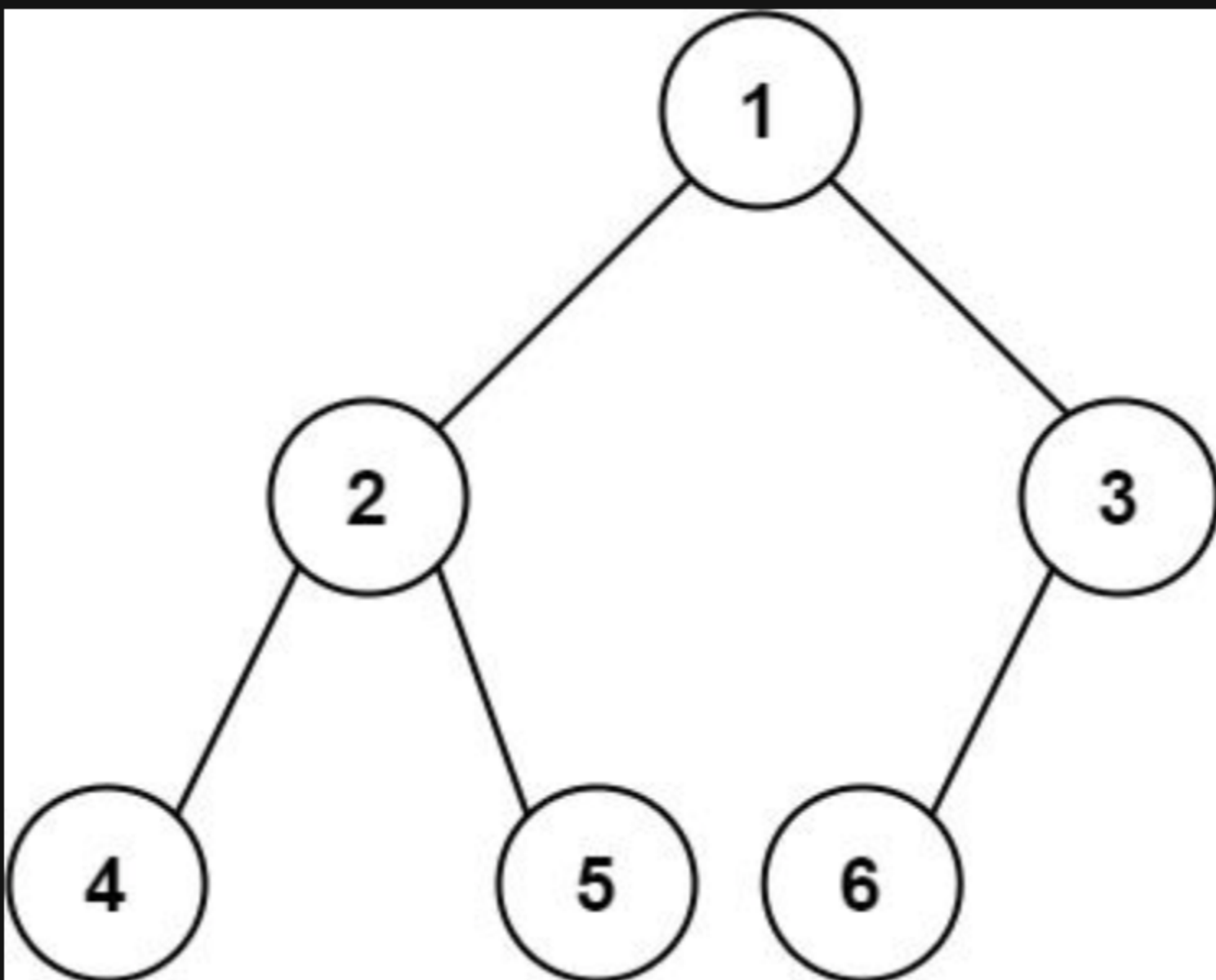

```
Input: root = [1,2,3,4,5,6]
Output: 6
```

Example 2:

```
Input: root = []
Output: 0
```

Example 3:

```
Input: root = [1]
Output: 1
```

Constraints:

- The number of nodes in the tree is in the range `[0, 5 * 10`^{4}`]`.
- `0 <= Node.val <= 5 * 10`^{4}
- The tree is guaranteed to be **complete**.