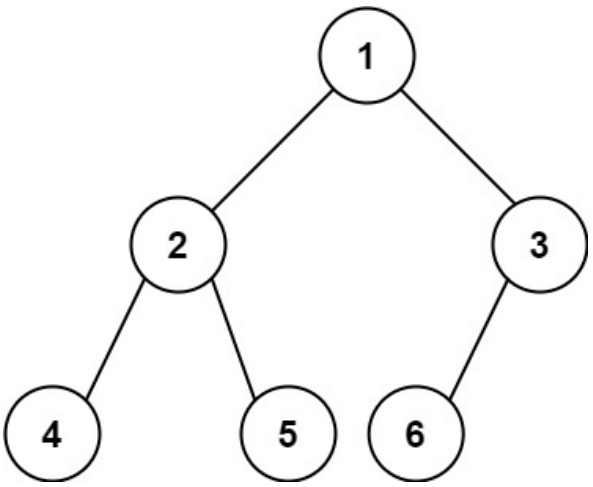
222. Count Complete Tree Nodes

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 2h 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.