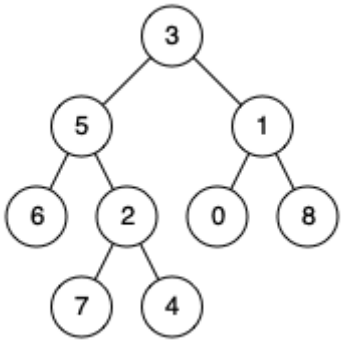
1676. Lowest Common Ancestor of a Binary Tree IV

Medium 349 13 Add to List Share

Given the `root` of a binary tree and an array of `TreeNode` objects `nodes`, return *the lowest common ancestor (LCA) of **all the nodes** in* `nodes`. All the nodes will exist in the tree, and all values of the tree's nodes are **unique**

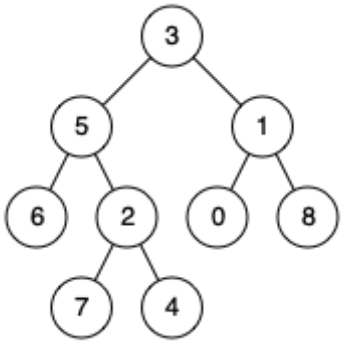
Extending the **definition of LCA on Wikipedia**: "The lowest common ancestor of `n` nodes p_1, p_2, ..., p_n in a binary tree `T` is the lowest node that has every p_i as a **descendant** (where we allow **a node to be a descenda of itself**) for every valid `i` ". A **descendant** of a node `x` is a node `y` that is on the path from node `x` to some le node.

Example 1:




```
Input: root = [3,5,1,6,2,0,8,null,null,7,4], nodes = [4,7]
Output: 2
Explanation: The lowest common ancestor of nodes 4 and 7 is node 2.
```

Example 2:




```
Input: root = [3,5,1,6,2,0,8,null,null,7,4], nodes = [1]
Output: 1
```