

Smallest String Starting From Leaf

You are given the root of a binary tree where each node has a value in the range [0, 25] representing the letters 'a' to 'z'.

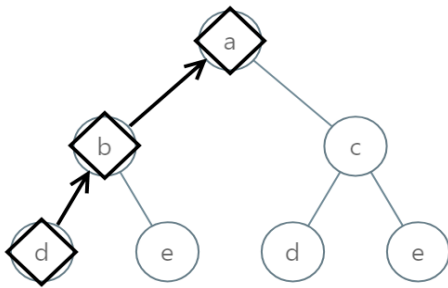
Return the **lexicographically smallest** string that starts at a leaf of this tree and ends at the root.

As a reminder, any shorter prefix of a string is **lexicographically smaller**.

- For example, "ab" is lexicographically smaller than "aba".

A leaf of a node is a node that has no children.

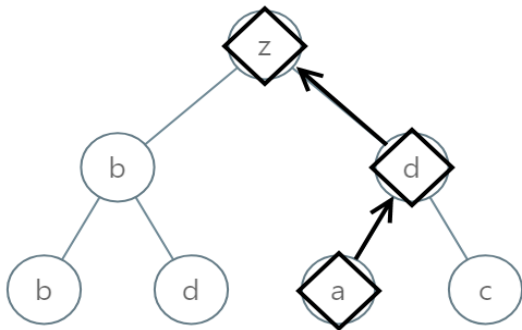
Example 1:



Input: root = [0,1,2,3,4,3,4]

Output: "dba"

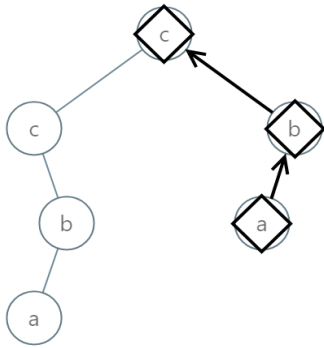
Example 2:



Input: root = [25,1,3,1,3,0,2]

Output: "adz"

Example 3:



Input: root = [2,2,1,null,1,0,null,0]

Output: "abc"

Constraints:

- The number of nodes in the tree is in the range [1, 8500].
- $0 \leq \text{Node.val} \leq 25$