

988. Smallest String Starting From Leaf

Description

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'`.

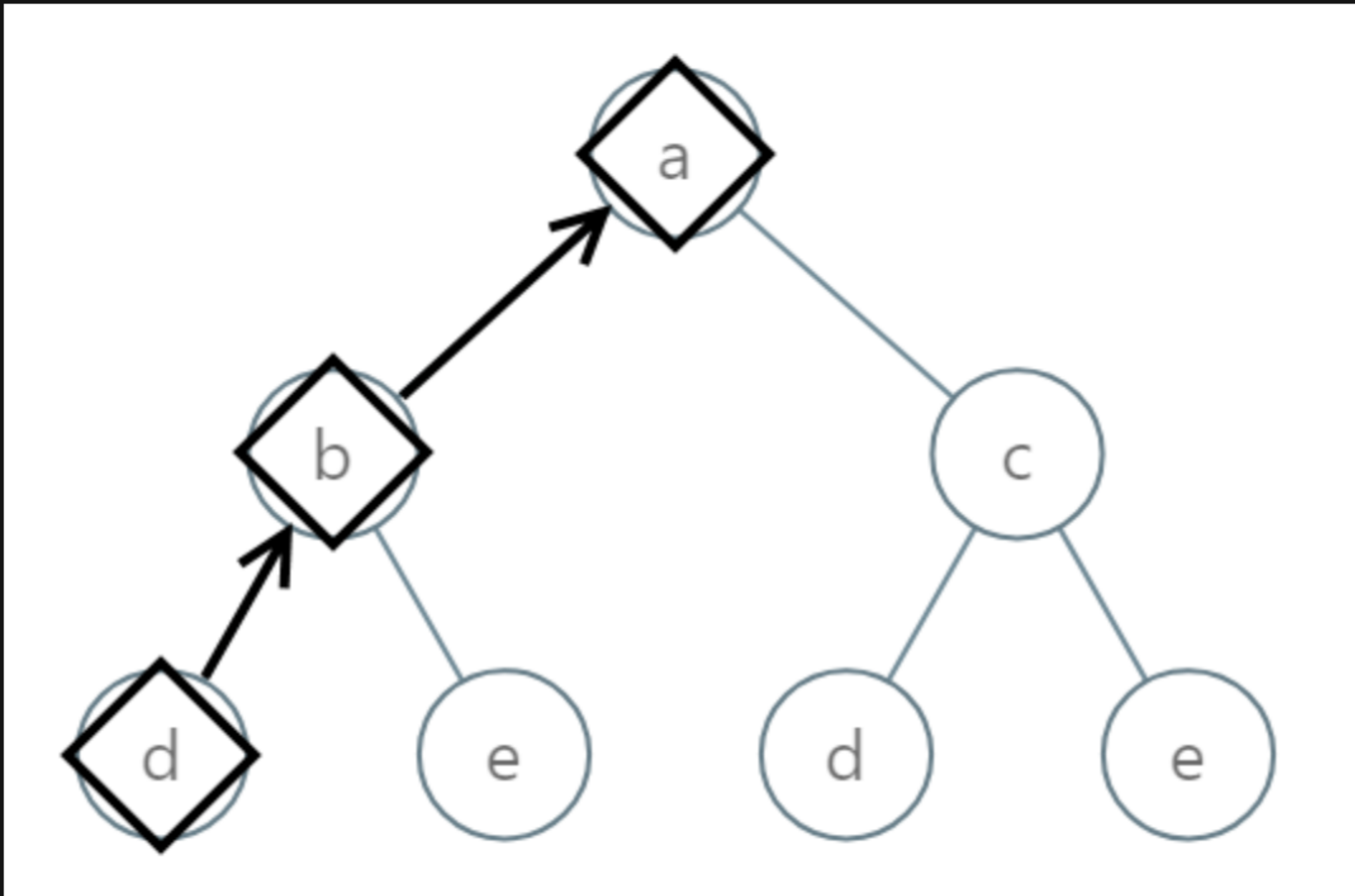
Return *the **lexicographically smallest** string that starts at a leaf of this tree and ends at the root*.

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

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

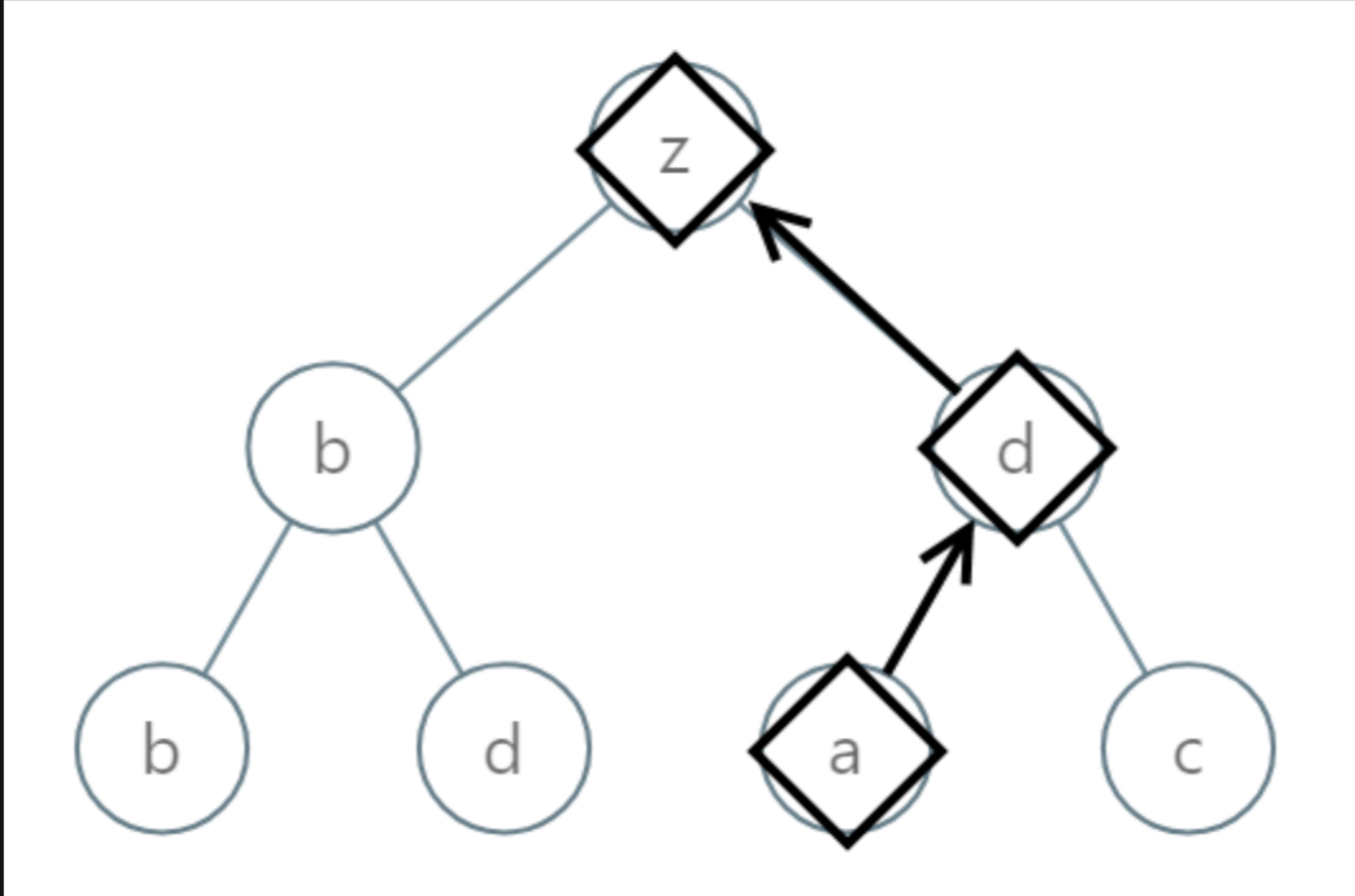
A leaf of a node is a node that has no children.

Example 1:



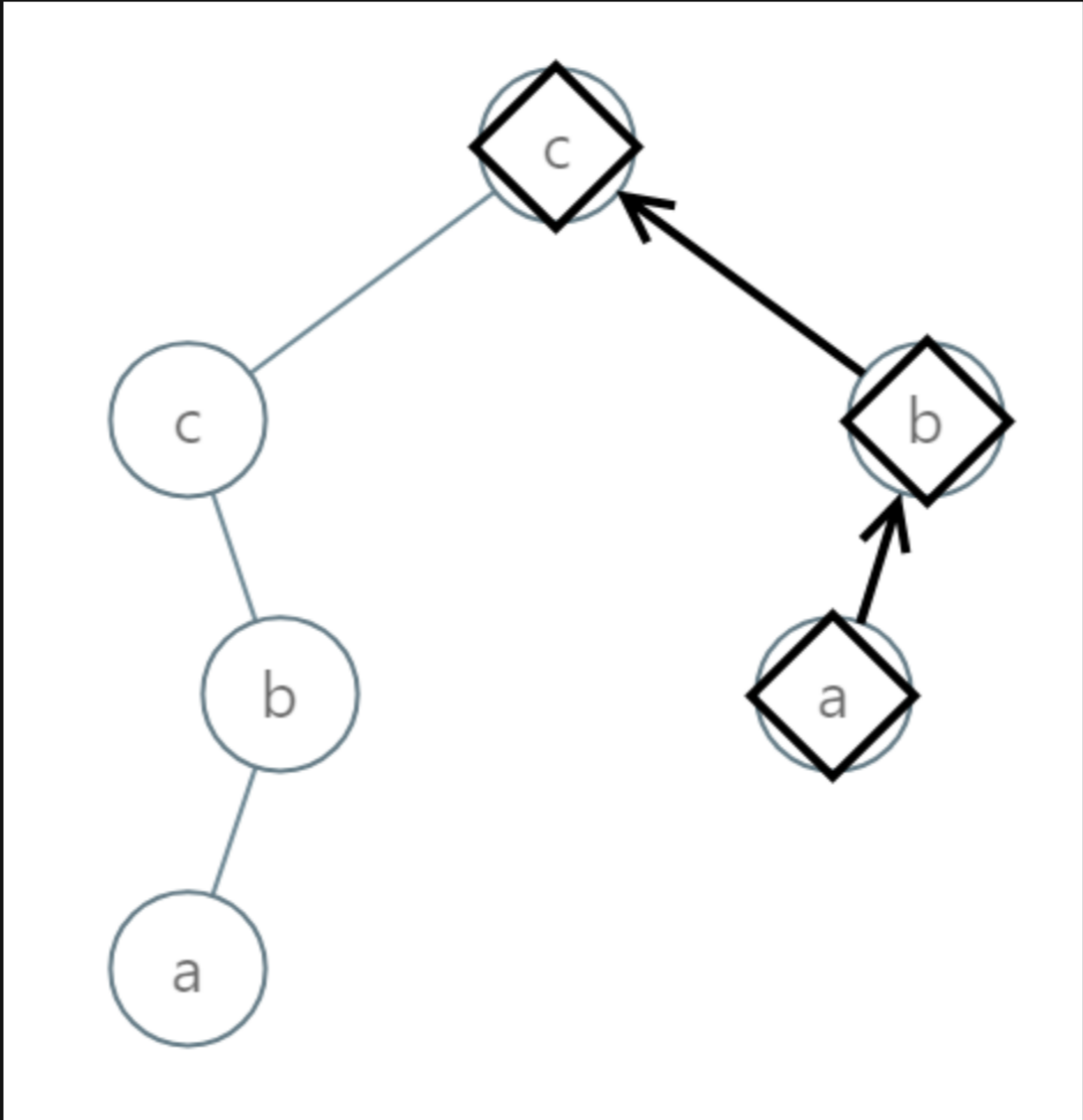
Input: `root = [0,1,2,3,4,3,4]`
Output: `"dba"`

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 <= Node.val <= 25`

