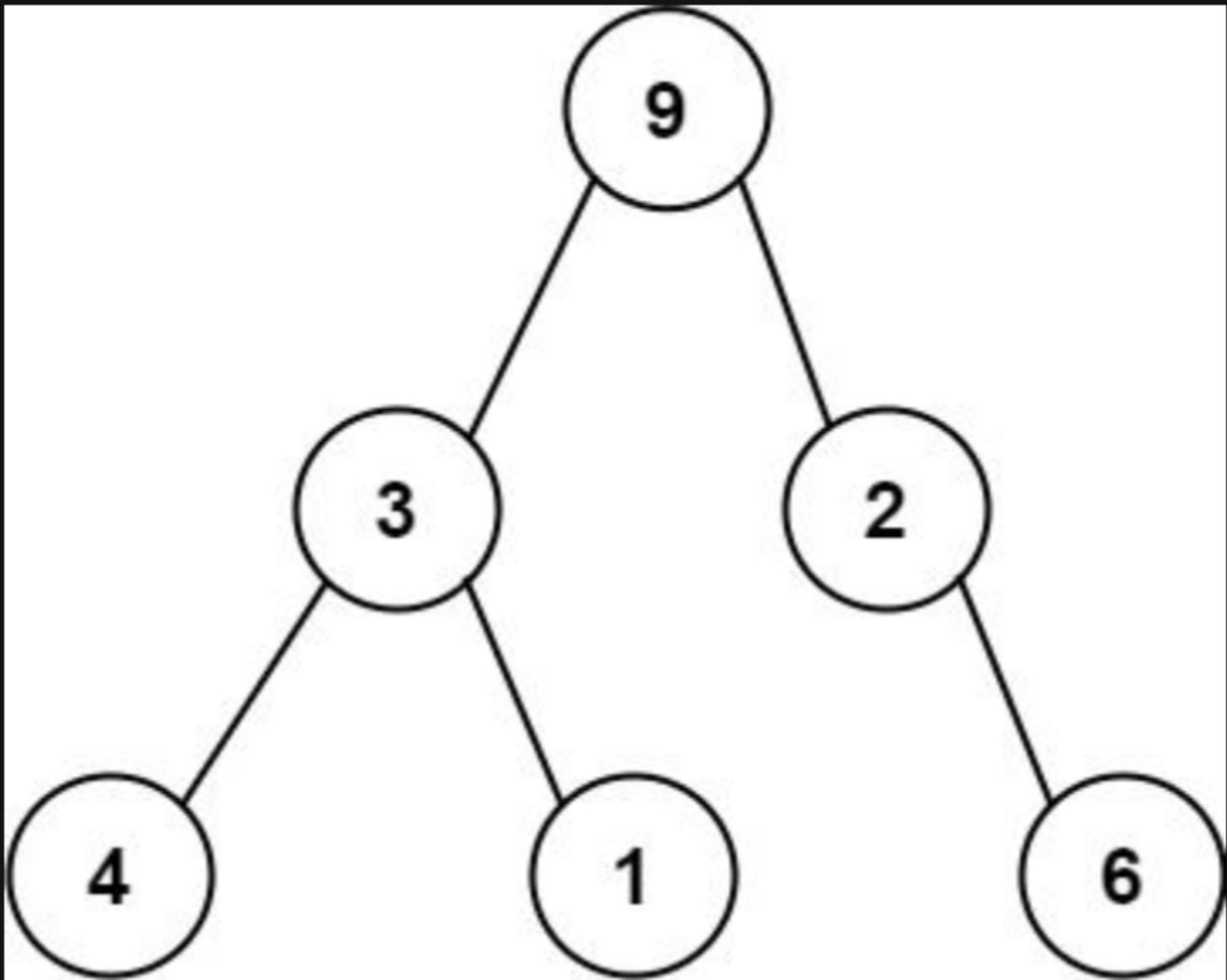


331. Verify Preorder Serialization of a Binary Tree

Description

One way to serialize a binary tree is to use **preorder traversal** . When we encounter a non-null node, we record the node's value. If it is a null node, we record using a sentinel value such as `'#'` .



For example, the above binary tree can be serialized to the string `"9,3,4,#,#,1,#,#,2,#,6,#,#"` , where `'#'` represents a null node.

Given a string of comma-separated values `preorder` , return `true` if it is a correct preorder traversal serialization of a binary tree.

It is **guaranteed** that each comma-separated value in the string must be either an integer or a character `'#'` representing null pointer.

You may assume that the input format is always valid.

- For example, it could never contain two consecutive commas, such as `"1,,3"` .

Note: You are not allowed to reconstruct the tree.

Example 1:

Input: preorder = "9,3,4,#,#,1,#,#,2,#,6,#,#"
Output: true

Example 2:

Input: preorder = "1,#"
Output: false

Example 3:

Input: preorder = "9,#,#,1"
Output: false

Constraints:

- `1 <= preorder.length <= 104`
- `preorder` consist of integers in the range `[0, 100]` and `'#'` separated by commas `','` .

