

Description

Solution

Submissions

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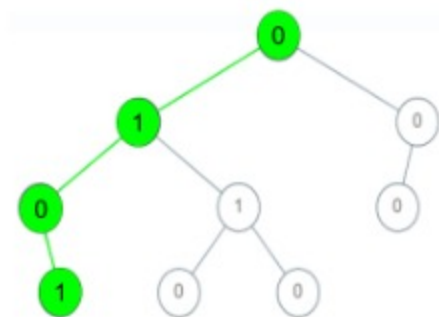
1430. Check If a String Is a Valid Sequence from Root to Leaves Path in a Binary Tree

Medium 32 1 Add to List Share

Given a binary tree where each path going from the root to any leaf form a **valid sequence**, check if a given string is a **valid sequence** in such binary tree.

We get the given string from the concatenation of an array of integers `arr` and the concatenation of all values of the nodes along a path results in a **sequence** in the given binary tree.

Example 1:



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

Output: true

Explanation:

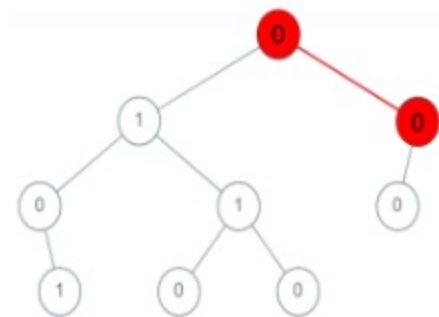
The path 0 -> 1 -> 0 -> 1 is a valid sequence (green color in the figure).

Other valid sequences are:

0 -> 1 -> 1 -> 0

0 -> 0 -> 0

Example 2:

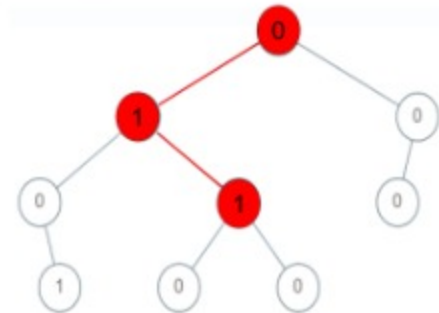


Input: root = [0,1,0,0,1,0,null,null,1,0,0], arr = [0,0,1]

Output: false

Explanation: The path 0 -> 0 -> 1 does not exist, therefore it is not even a sequence.

Example 3:



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

Output: false

Explanation: The path 0 -> 1 -> 1 is a sequence, but it is not a valid sequence.

Constraints:

- $1 \leq \text{arr.length} \leq 5000$
- $0 \leq \text{arr}[i] \leq 9$
- Each node's value is between [0 - 9].

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Seen this question in a real interview before?

Yes

No