

Description

Solution

Discuss (999+)

Submissions

98. Validate Binary Search Tree

Medium

10815

936

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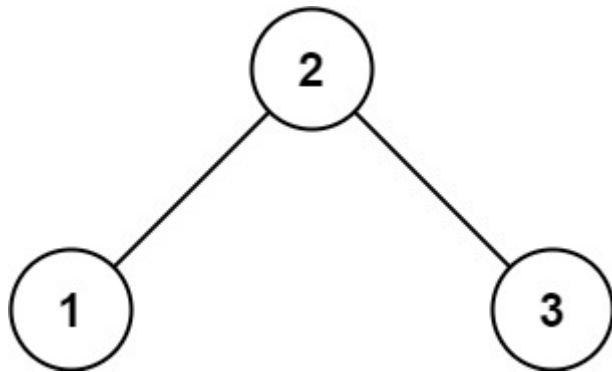
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Given the `root` of a binary tree, *determine if it is a valid binary search tree (BST)*.

A **valid BST** is defined as follows:

- The left subtree of a node contains only nodes with keys **less than** the node's key.
- The right subtree of a node contains only nodes with keys **greater than** the node's key.
- Both the left and right subtrees must also be binary search trees.

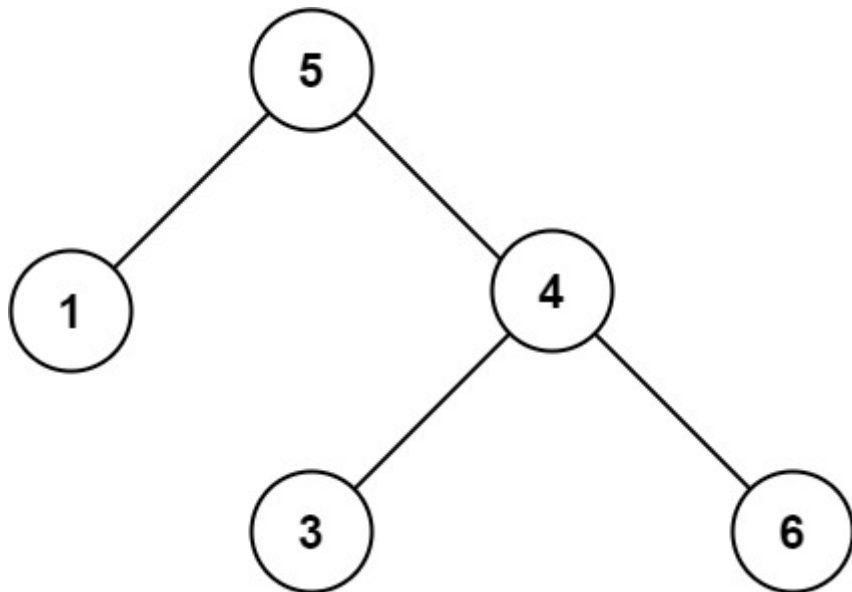
Example 1:



Input: root = [2,1,3]

Output: true

Example 2:



Input: root = [5,1,4,null,null,3,6]

Output: false

Explanation: The root node's value is 5 but its right child's value is 4.

Constraints:

- The number of nodes in the tree is in the range $[1, 10^4]$.
- $-2^{31} \leq \text{Node.val} \leq 2^{31} - 1$

Accepted 1,513,455 Submissions 4,894,821

Seen this question in a real interview before?

Yes

No

Companies

Related Topics

Similar Questions

Java

Autocomplete

```
1  /**
2   * Definition for a binary tree
   node.
3   * public class TreeNode {
4   *     int val;
5   *     TreeNode left;
6   *     TreeNode right;
7   *     TreeNode() {}
8   *     TreeNode(int val) { this.val
   = val; }
9   *     TreeNode(int val, TreeNode
   left, TreeNode right) {
10  *         this.val = val;
11  *         this.left = left;
12  *         this.right = right;
13  *     }
14  * }
15  */
16  class Solution {
17  public boolean
   isValidBST(TreeNode root) {
18      return isValidBST(root,
   Long.MIN_VALUE, Long.MAX_VALUE);
19  }
20
21  public boolean
   isValidBST(TreeNode root, long min,
   long max){
22      if(root == null) return
   true;
23      if(root.val >= max ||
   root.val <= min) return false;
24      return isValidBST(root.left,
   min, root.val) &&
   isValidBST(root.right, root.val,
   max);
25  }
26  }
```

Testcase

Run Code Result

Debugger

Accepted Runtime: 0 ms

Your input [2,1,3]

Output true Diff

Expected true

Console

Use Example Testcases

Problems

Pick One

< Prev

98/2346

Next >

Run Code

Submit