

Description

Solution

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Submissions

C++

Auto

510. Inorder Successor in BST II

Medium

803

38

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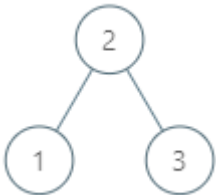
Given a `node` in a binary search tree, return *the in-order successor of that node in the BST*. If that node has no in-order successor, return `null`.

The successor of a `node` is the node with the smallest key greater than `node.val`.

You will have direct access to the node but not to the root of the tree. Each node will have a reference to its parent node. Below is the definition for `Node`:

```
class Node {
    public int val;
    public Node left;
    public Node right;
    public Node parent;
}
```

Example 1:



Input: `tree = [2,1,3]`, `node = 1`

Output: 2

Explanation: 1's in-order successor node is 2. Note that both the node and the return value is of Node type.

Example 2:

```

1  /*
2  // Definition
3  class Node {
4  public:
5      int val;
6      Node* left;
7      Node* right;
8      Node* parent;
9  };
10 /*
11
12 class Solution {
13 public:
14     Node*
15     inorderSuccessor(Node* node) {
16         if (node == null)
17             return null;
18         if (node->right != null)
19             return node->right;
20         Node* p = node->parent;
21         while (p != null && p->val < node->val)
22             p = p->parent;
23         return p;
24     }
25     int val;
26     while
27     {
28         i
29         >val>val)
30     }
31     }
32     >parent;
33 }
```

Testcase Run Code Resu

Accepted Runtime

Your input

[5,3,6
4

Output

5

Expected

5

Problems

Pick One

< Prev

149

Next >

Example
uses

?

Run Code