

Description

Solution

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Submissions

C++

Auto

285. Inorder Successor in BST

Medium

2333

84

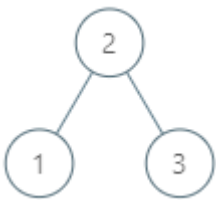
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Given the `root` of a binary search tree and a node `p` in it, return the *in-order successor of that node in the BST*. If the given node has no in-order successor in the tree, return `null`.

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

Example 1:

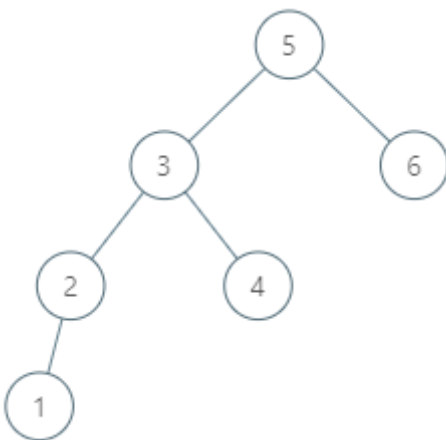


Input: `root = [2,1,3]`, `p = 1`

Output: 2

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

Example 2:



Input: `root = [5,3,6,2,4,null,null,1]`, `p = 6`

Output: `null`

Explanation: There is no in-order successor of the current

```

1  /**
2   * Definition
3   * struct Tree
4   *   int val
5   *   TreeNode*
6   *   TreeNode*
7   *   TreeNode*
8   *   val(x), left(
9   *   }
10  *   };
11  */
12  class Solution
13  public:
14      TreeNode*
15      inorderSuccessor(
16      root, TreeNode*
17      p)
18      {
19          if (p == null)
20              return null;
21          while (p != null)
22          {
23              if (p->right != null)
24              {
25                  p = p->right;
26              }
27              else
28              {
29                  p = p->left;
30              }
31          }
32          return p;
33      }
34  };
  
```

Testcase Run Code Result

Accepted Runtime

Your input [5,3,6,6]

Output null

Expected null

Problems

Pick One

< Prev

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Sample Input

Run Code