915 · Inorder Predecessor in BST

Description

Given a binary search tree and a node in it, find the in-order predecessor of that node in the BST.

Example

Example1

```
Input: root = {2,1,3}, p = 1
Output: null
```

Example2

```
Input: root = {2,1}, p = 2
Output: 1
```

```python
class Solution:
    """
    @param root: the given BST
    @param p: the given node
    @return: the in-order predecessor of the given node in the BST
    """
    def inorderPredecessor(self, root, p):
        # write your code here
        # write your code here
        if root is None:
            return None
        if root.left is root.right:
            return None
        ans = []
        self.helper(root,p,ans)
        return None if not len(ans) else ans[-1]
    def helper(self,root,p,ans):
        if root is None:
            return
        self.helper(root.left,p,ans)
        if root.val<p.val:
            ans.append(root)
        self.helper(root.right,p,ans)
```