AlgoExpert Quad Layout Python 12px Sublime Monokai 00:00:00

Prompt Scratchpad Our Solution(s) Video Explanation Run Code

Solution 1

```
_{\rm 1} \, # Copyright @ 2020 AlgoExpert, LLC. All rights reserved.
 3 # O(n) time | O(1) space
 4 def iterativeInOrderTraversal(tree, callback):
        previousNode = None
        currentNode = tree
        while currentNode is not None:
           if previousNode is None or previousNode == currentNode.parent:
9
               if currentNode.left is not None:
10
                   nextNode = currentNode.left
11
12
                   callback(currentNode)
13
                   nextNode = currentNode.right if currentNode.right is not None else currentNode.parent
14
           elif previousNode == currentNode.left:
15
               callback(currentNode)
16
               nextNode = currentNode.right if currentNode.right is not None else currentNode.parent
17
            else:
              nextNode = currentNode.parent
18
19
           previousNode = currentNode
20
           currentNode = nextNode
21
```