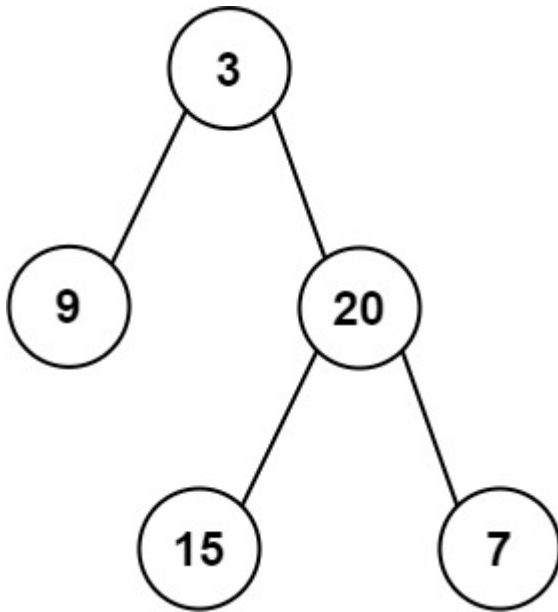


# 105. Construct Binary Tree from Preorder and Inorder Traversal

Given two integer arrays `preorder` and `inorder` where `preorder` is the preorder traversal of a binary tree and `inorder` is the inorder traversal of the same tree, construct and return *the binary tree*.

**Example 1:**



Input: `preorder = [3,9,20,15,7]`, `inorder = [9,3,15,20,7]`  
Output: `[3,9,20,null,null,15,7]`

**Example 2:**

Input: `preorder = [-1]`, `inorder = [-1]`  
Output: `[-1]`

**Constraints:**

- `1 <= preorder.length <= 3000`
- `inorder.length == preorder.length`
- `-3000 <= preorder[i], inorder[i] <= 3000`
- `preorder` and `inorder` consist of **unique** values.
- Each value of `inorder` also appears in `preorder`.
- `preorder` is **guaranteed** to be the preorder traversal of the tree.
- `inorder` is **guaranteed** to be the inorder traversal of the tree.

```
def buildTree(self, preorder: List[int], inorder: List[int]) ->
Optional[TreeNode]:
    return self.buildTreeHelper(preorder,inorder)

def buildTreeHelper(self,preorder,inorder):
    if len(inorder)==0:
        return None

    node = TreeNode(preorder[0])
    data = preorder[0]
    idx = inorder.index(data)
    count = idx
    node.left = self.buildTreeHelper(preorder[1:count+1],inorder[:idx])
    node.right = self.buildTreeHelper(preorder[idx+1:],inorder[idx+1:])
    return node
```