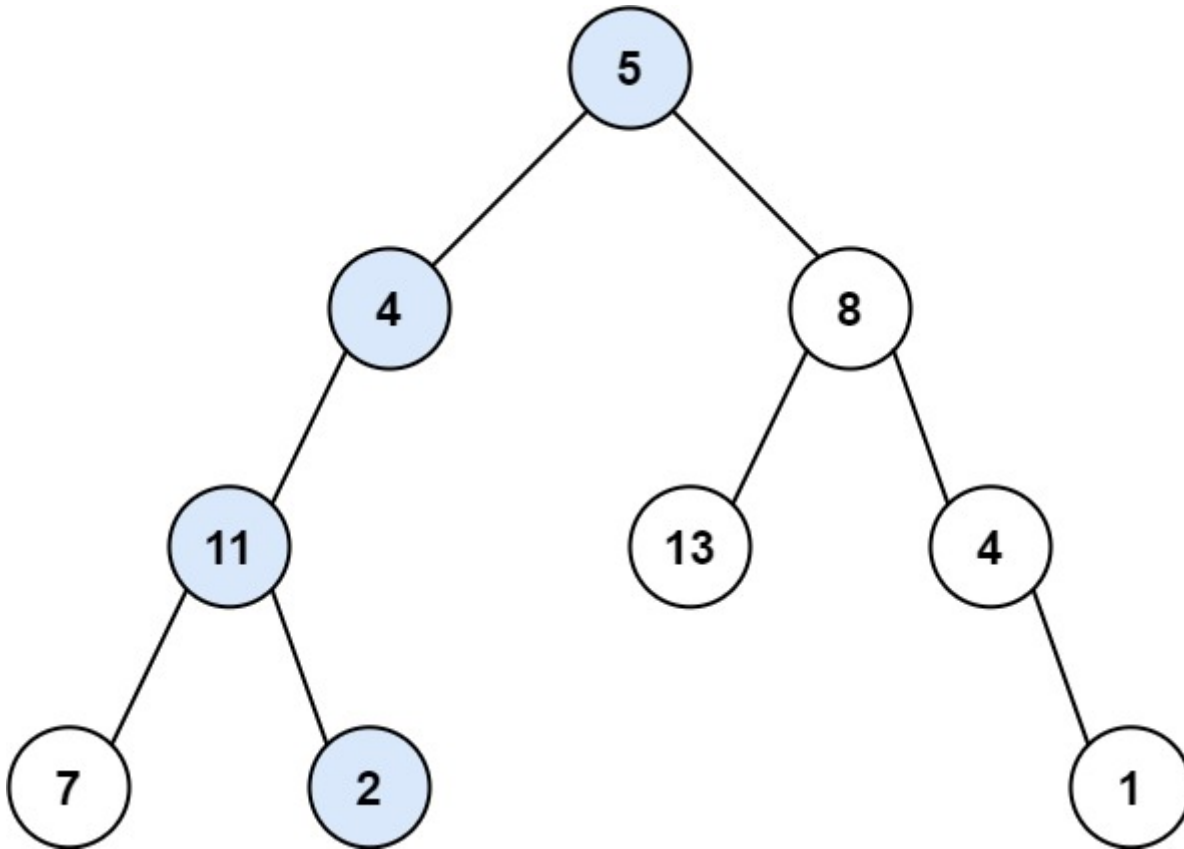


## 112. Path Sum

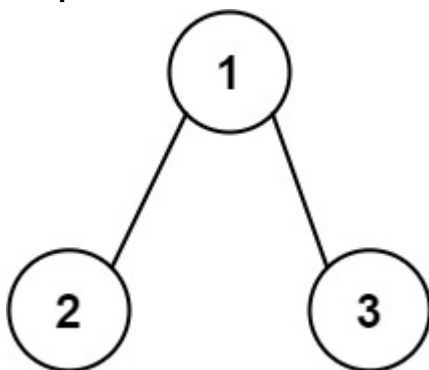
Given the `root` of a binary tree and an integer `targetSum`, return `true` if the tree has a **root-to-leaf** path such that adding up all the values along the path equals `targetSum`.

A **leaf** is a node with no children.



**Input:** `root = [5,4,8,11,null,13,4,7,2,null,null,null,1]`, `targetSum = 22`

**Output:** `true`



**Input:** `root = [1,2,3]`, `targetSum = 5`

**Output:** `false`

```
def hasPathSum(self, root: TreeNode, targetSum: int) -> bool:
    return self.helper(root, targetSum)
```

```
def helper(self, root, targetSum):  
    if root is None:  
        return 0  
    if root.left is root.right:  
        targetSum = targetSum-root.val  
        return True if targetSum==0 else False  
    lt = self.helper(root.left, targetSum-root.val)  
    rt = self.helper(root.right, targetSum-root.val)  
    return lt or rt
```