112. Path Sum

Description | Hints | Submissions | Discuss | Solution

Pick One

Given a binary tree and a sum, determine if the tree has a root-to-leaf path such that adding up all the values along the path equals the given sum.

Note: A leaf is a node with no children.

Example:

Given the below binary tree and `sum = 22`,

```
      5
     / \
    4   8
   /   / \
  11  13  4
 /  \      \
7    2      1
```

return true, as there exist a root-to-leaf path `5->4->11->2` which sum is 22.

```java
public class L112 {

    public class TreeNode {
              int val;
              TreeNode left;
              TreeNode right;
              TreeNode(int x) { val = x; }
          }

    public boolean hasPathSum(TreeNode root, int sum) {
         if(root == null)
             return false;
         if(root.left == null && root.right == null && sum - root.val == 0)
             return true;

         return hasPathSum(root.left, sum - root.val) || hasPathSum(root.right, sum - root.val);
    }

}
```