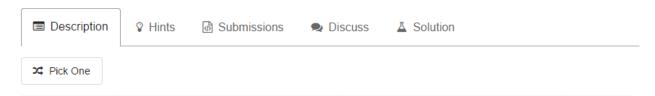
## 113. Path Sum II



Given a binary tree and a sum, find all root-to-leaf paths where each path's sum 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 5 1
```

Return:

```
[
    [5,4,11,2],
    [5,8,4,5]
]
```

```
public class L113 {
    public class TreeNode {
              int val;
              TreeNode left;
              TreeNode right;
              TreeNode(int x) { val = x; }
          }
    List<List<Integer>> result = new ArrayList<List<Integer>>();
    List<Integer> path = new ArrayList<>();
    public List<List<Integer>> pathSum(TreeNode root, int sum) {
        getSum(root, 0, sum);
        return result;
     public void getSum(TreeNode root, int sum, int target){
         if(root == null)
            return ;
         sum += root.val;
         path.add(root.val);
         if(root.left == null && root.right == null && sum == target)
             result.add(new ArrayList<>(path)); //不能是add(path), 而必须是add(new ArrayList<>(path))
         getSum(root.left, sum, target);
         getSum(root.right, sum, target);
         sum -= root.val;
         path.remove(path.size() - 1);
         return;
     }
}
```