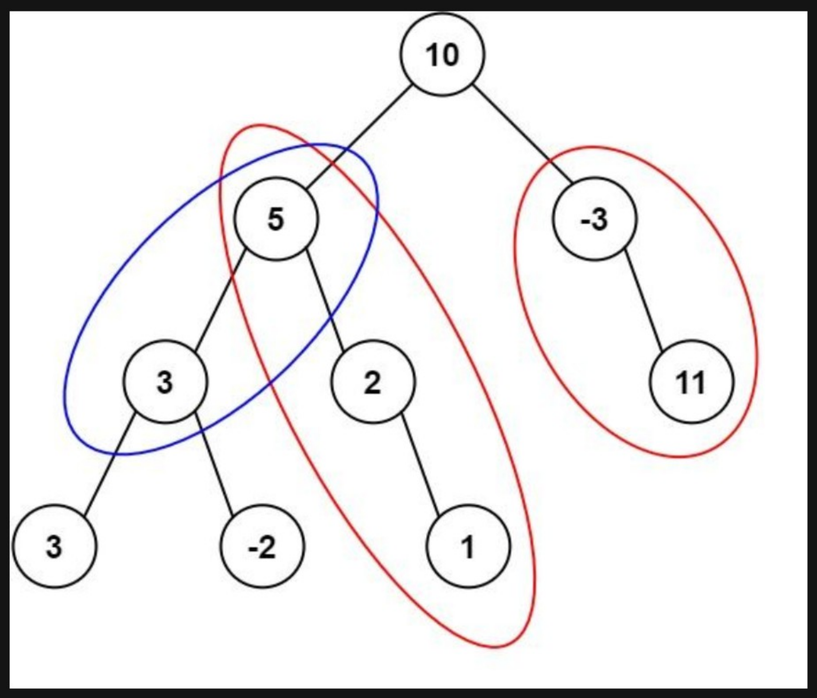
437. Path Sum III

Description

Given the `root` of a binary tree and an integer `targetSum`, return *the number of paths where the sum of the values along the path equals* `targetSum`.

The path does not need to start or end at the root or a leaf, but it must go downwards (i.e., traveling only from parent nodes to child nodes).

Example 1:




```
Input: root = [10,5,-3,3,2,null,11,3,-2,null,1], targetSum = 8
Output: 3
Explanation: The paths that sum to 8 are shown.
```

Example 2:

```
Input: root = [5,4,8,11,null,13,4,7,2,null,null,5,1], targetSum = 22
Output: 3
```

Constraints:

- The number of nodes in the tree is in the range `[0, 1000]`.
- `-10^9 <= Node.val <= 10^9`
- `-1000 <= targetSum <= 1000`