#### Path Sum - LeetCode

**笔记本:** leetcode **创建时间:** 2024/9/13 11:04

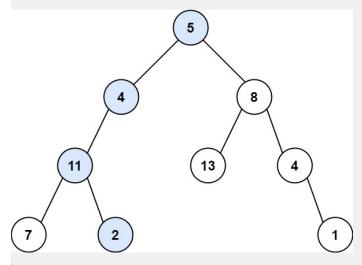
**URL:** https://leetcode.com/problems/path-sum/description/

# 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.

#### Example 1:

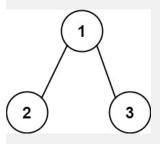


**Input:** root = [5,4,8,11,null,13,4,7,2,null,null,null,1], targetSum = 22

Output: true

**Explanation:** The root-to-leaf path with the target sum is shown.

#### Example 2:



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

Output: false

**Explanation:** There two root-to-leaf paths in the tree:

(1 --> 2): The sum is 3. (1 --> 3): The sum is 4.

There is no root-to-leaf path with sum = 5.

## Example 3:

**Input:** root = [], targetSum = 0

Output: false

**Explanation:** Since the tree is empty, there are no root-to-leaf paths.

### Constraints:

- The number of nodes in the tree is in the range [0, 5000].
- -1000 <= Node.val <= 1000
- -1000 <= targetSum <= 1000