

# 337. House Robber III

## Difficulty : Medium

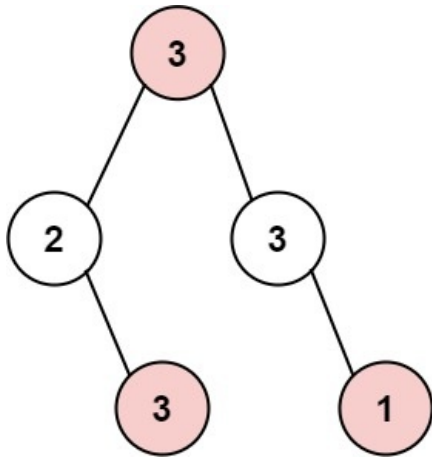
<https://leetcode.com/problems/house-robber-iii>

The thief has found himself a new place for his thievery again. There is only one entrance to this area, called `root`.

Besides the `root`, each house has one and only one parent house. After a tour, the smart thief realized that all houses in this place form a binary tree. It will automatically contact the police if **two directly-linked houses were broken into on the same night**.

Given the `root` of the binary tree, return *the maximum amount of money the thief can rob **without alerting the police***.

### Example 1:

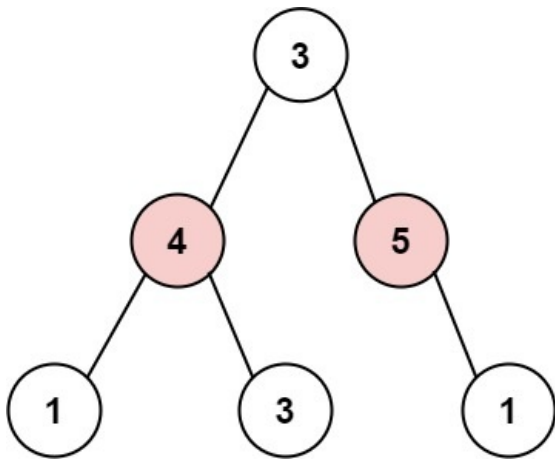


**Input:** `root = [3,2,3,null,3,null,1]`

**Output:** 7

**Explanation:** Maximum amount of money the thief can rob = 3 + 3 + 1 = 7.

### Example 2:



**Input:** `root = [3,4,5,1,3,null,1]`

**Output:** 9

**Explanation:** Maximum amount of money the thief can rob = 4 + 5 = 9.

### Constraints:

- The number of nodes in the tree is in the range  $[1, 10^4]$ .
- $0 \leq \text{Node.val} \leq 10^4$