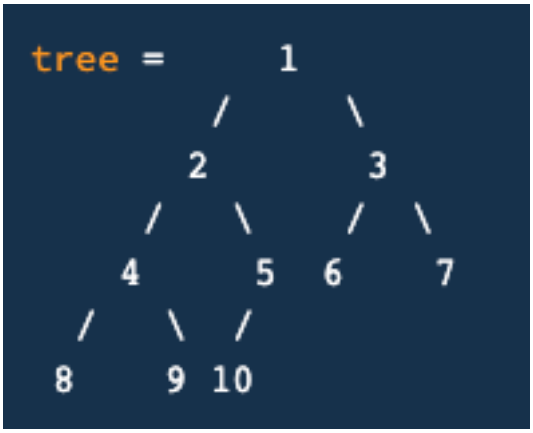
Branch Sums

Write a function that takes in a binary Tree and return a list of its branch sums ordered from left most branch sum to right most branch sum.

A branch sum is the sum of all values in a binary Tree branch. A binary Tree branch is a path of nodes in a tree that starts at the root node and ends at the leaf node.

Each Binary Tree node has an integer value, a left child node, and a right child node. Children nodes can either be binary tree nodes themselves or None/Null.

Example:



Solution:

➔ [15, 16, 18, 10, 11]

Optimal space and time complexity:
O(n) time and O(n) space, where n is the number of nodes in the Binary Tree.