Data Structures Lab - Fall 2020

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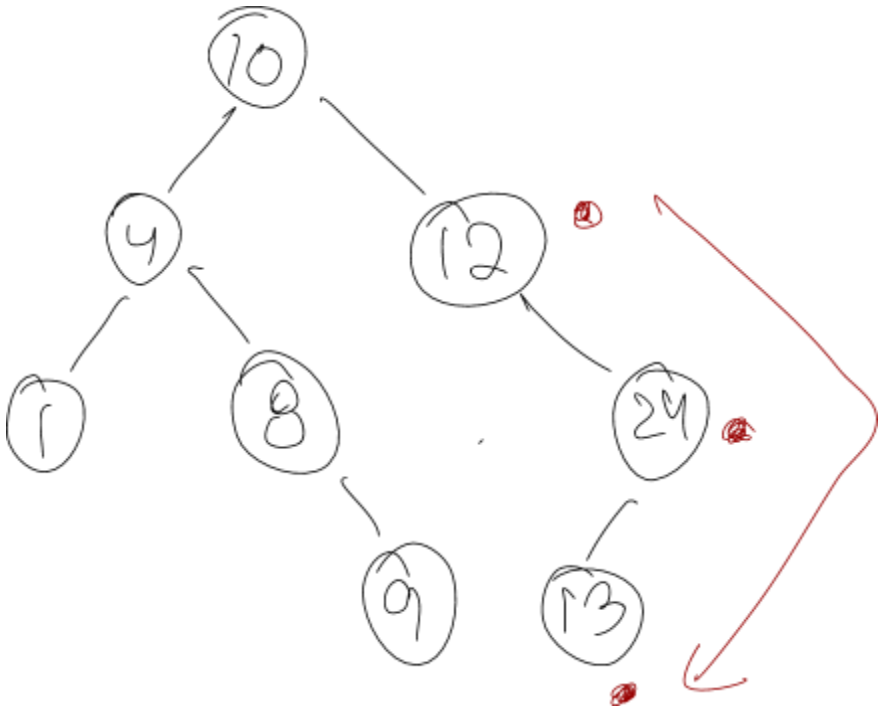
Binary Search Tree

Assignment+Task-Section-A/B

NOTE: You can not use global variables or class variable however you can create multiple functions but these function will only be called from marker predefined functions

1. Write a code to count the number of nodes from any given node value.

   Example:
   Input: 12
   Output: 3 (12, 24 and 13)

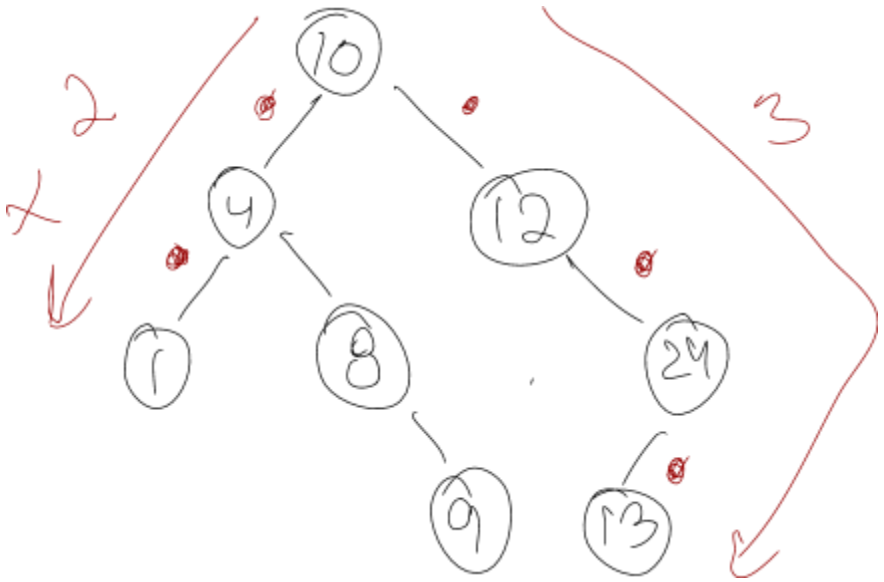


2. Write a code to find the leftmost leaf with maximum height and return the height.

   Example:

Input: This BST

Output: 3 (10->12, 12->24, 24->13)

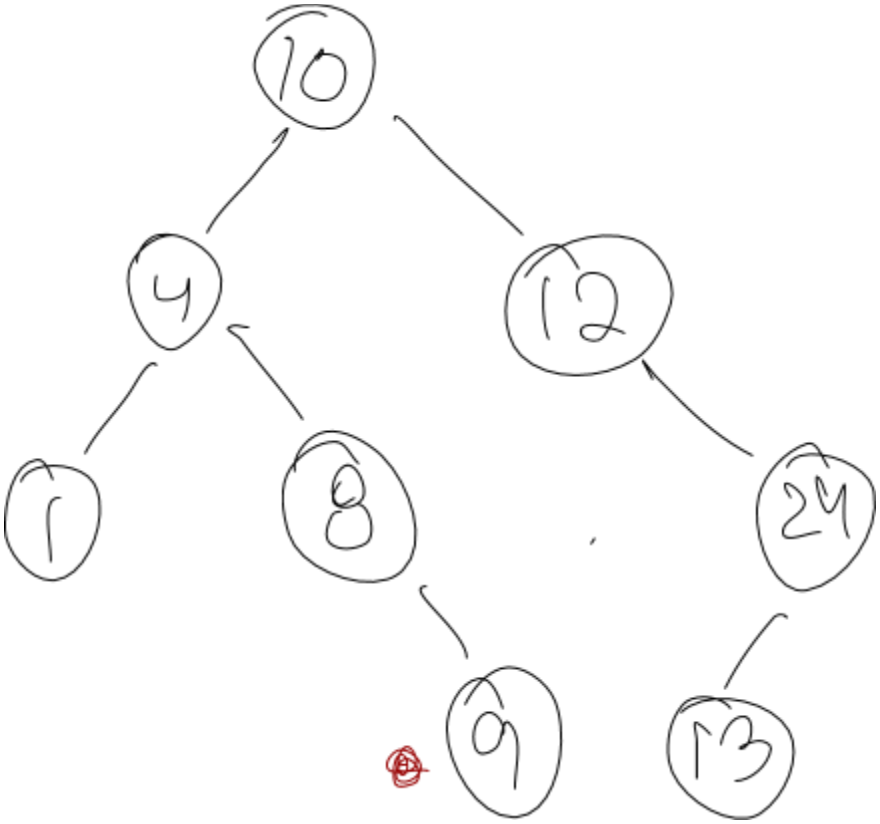


3. Find the sum of all right leaf nodes in a binary tree.

   Example:

   Input: This BST

   Output: 9

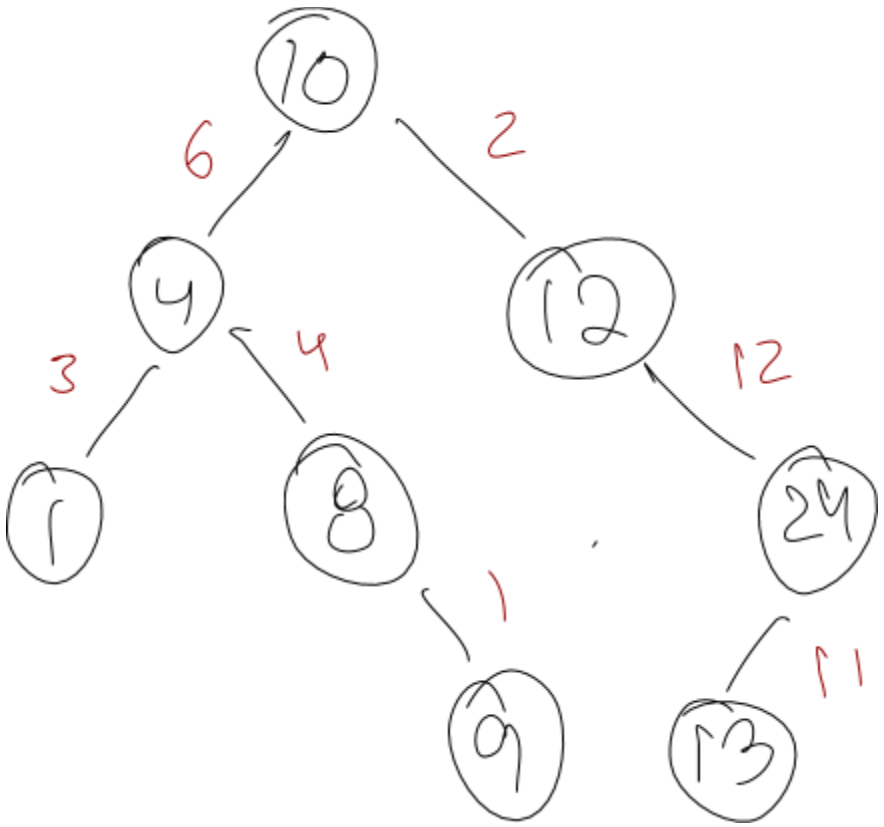


4. Given a Binary Search Tree (BST), return the minimum difference between the values of any two different nodes in the tree.

   Example:

   Input: This BST

   Output: 1 (minimum difference is between node 8 and node 9)


10
6
2
4
12
3
4
12
1
8
24
1
11
9
13