Foundations & Data Structures With C++



Assignment 14 – Binary Trees

- 1. Given a binary tree find sum of all the nodes.
- 2. Given a Binary tree check if it is balanced i.e. depth of the left and right subtrees of every node must differ by 1 or less.
- 3. Given a Binary tree write code to create a separate linked list for each level. You should return an array of linked lists.
- 4. Given a binary tree print all nodes that don't have a sibling.
- 5. Given a binary tree remove all the leaves from the tree.
- 6. Given a binary tree print the level order traversal, but **make sure each level** start at a new line.
- 7. Given a binary tree print the zig zag order i.e. print level 1 from left to right level 2 from right to left and so on. This means odd levels should get printed from left to right and even levels should be printed from right to left. Each level should be printed at a new line.
- 8. Given preorder and inorder, construct the tree.
- 9. Given postorder and inorder construct the tree.

Bonus

1. Pretty Print a Binary tree

Hint: Find the height of the tree first