



Trees Assignment

Batch: Interview Preparation

1. Implement BFS on Generic Tree
2. Find max depth of a generic tree
3. Find the largest element in a generic tree
4. Find diameter of a binary tree
5. Find next largest element in a binary tree. I.e. given a number n find just greater element than n.
6. Given a binary tree, remove all the leaves from the tree.
7. Given a binary tree, find its height.
8. Count number of leaf nodes in a binary tree.
9. Find the second largest value in the tree.
10. Given a binary tree print all nodes that don't have a sibling
11. Given a binary tree, write code to create a separate linked list for each level
12. Given a binary tree check if its balanced i.e. depth of left and right subtrees of every node differ by at max 1
13. Given a tree. Replace every node with sum of left and right child
14. Print nodes at K distance from root in binary tree
15. 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.
16. Find LCA of two nodes in a binary tree
 - a. You can use up to $O(n)$ extra space
 - b. Do it without storing nodes in a Data Structure