

Lab Assignment 4

Implement ADT AVL Tree using a linked list of nodes of structure having Balance_Factor, Student Name, left pointer, right pointer, and parent pointers pointing to left sub-trees, right sub tree and parent of the node respectively.

Write following functions:

initAVL() // to initialize the tree.

insertNode() // recursive/ non-recursive function to add a new node to the AVL tree.

removeNode() // to remove a node from a tree.

traverse() // write any of the traversal method to display name, parent and balance_factor of each node.

destroyTree() // to delete all nodes of the tree

Write a menu driven program to invoke all above functions.