

Data Structure and Algorithm Lab

Lab Sheet-10

Lab schedule: November 25, 2021

Submission deadline: December 01, 2021, 11.59 PM

Q1. Write a program to implement an AVL Tree having following functionalities.

- Insert (): This function inserts a new node to an AVL tree. The node contains an integer type of data.
- BF(): This function returns the balance factor of a given node.
- LL(): This function performs LL rotation.
- RR(): This function performs RR rotation.
- LR(): This function performs LR rotation.
- RL(): This function performs RL rotation.
- Display (): This function displays **inorder** traversal sequence of the AVL tree.

After inserting a new node, if the resulting tree is not AVL then insert function calls appropriated rotation function to make the tree an AVL