

Department of Computer Science and Engineering Indian Institute of Technology Jodhpur CSL2020 - Data Structures and Algorithms

February 5, 2022

Lab - 5

- 1. Write a **C** program to construct a binary search tree (BST) using the given inorder and postorder traversals. The tree is accessed using a pointer pointing at root. Display a menu for the user to provide input, and call appropriate function with inputs provided. Assume that all the values in the BST are distinct and positive.
 - On menu input 1, call a function to receive inorder and postorder traversals of the BST from user and construct it. Display the number of leaves, the number of levels, and the number of nodes in each level.
 - On menu input 2, call a function to delete a node from the BST and display the preorder traversal of the tree. (Non-recursive code. No marks for the recursive version.) The node value will be input by the user. (If there is no node with such a value then print 'error'. If tree is empty, display 'empty'.) Only one node at a time will be asked for deletion.