

Lab Assignment 8

Binary Search Trees and Heaps

1. Write a program for binary search tree (BST) having functions for the following operations:
 - Insert an element (no duplicates are allowed),
 - Delete an existing element,
 - Traverse the BST (in-order, pre-order, and post-order),
 - Maximum depth, and
 - Minimum depth.
2. Implement Heapsort (Increasing/Decreasing order).
3. Implement priority queues using heaps.

Additional Questions:

- Write a non-recursive function to traverse a BST in in-order traversal using stack.
- Given preorder and inorder traversals, construct the BST.
- Given inorder and postorder traversals, construct the BST.