

Programme	:	B.Tech	Semester	:	Fall 20-21
Course	:	Data structures and Algorithms (Embedded Lab)	Code	:	CSE2003
Faculty	:	Dr.B. Saleena / Dr.V.M.Nisha	Slot	:	L43+L44

Exercise No: 10

Binary Search Trees (6/10/2020)

Q1. Implement Binary search Tree (BST) and perform the following operations

- Insert the keys 11,66, 6,9,40,28,5, 88,125,90
- Print the keys in sorted order using suitable traversal method.
- Search for a key x and prints its address if it is present.
- Print successor/predecessor of a given key x
- Delete the keys 40 and 88 one by one and print the tree in level order after each delete.

Note: Use only recursive functions for all the operations.

Q2. Write a program to build a binary search tree. Traverse a tree using an appropriate method and print a path whose sum of values of nodes in that path is equal to 'k'. If there are more than one path whose nodes values sum is equal to k, print the path which has minimum Path length.

Sample Input

11 (No of Values)

10 5 15 2 9 20 7 17 30 1 3 (Values)

62(k)

Sample Output

10 15 20 17 (Path)