

Data Structure and Algorithm

Assignment-04 (Fall 2023)

**Submission to be done on UCP PORTAL before
Due Date: Saturday, February 3, 2024, 5:00 PM**

Task 1 (No C++ Code Required)

Consider the following key elements 100,50,85,176,69,57,43,33,121,17,16,12,9, -28

- Insert the above key element in the Binary Search Tree
- Delete Key 57, 121,16,85 from BST

Task 2 (No C++ Code Required)

Convert Binary Search Tree having key elements. 100,50,85,176,69,57,43,33,121,17,16,12,9, -28 into the AVL Tree.

- Balance factor should be written clearly at each step.
- Delete Key 100,33,121,9, from AVL Tree
- Explain Rotations at each step:
 - LL Rotation
 - RR Rotation
 - LR Rotation
 - RL Rotation

