Programming and Data Structures Lab (CS2710)
Assignment-07: *Binary Search Tree*

Lab-work:

1. Implement Binary Search Tree (BST) ADT
   Operations:
   - (a) Find Maximum and Minimum
   - (b) Find any Element
   - (c) Insert an Element
   - (d) Delete an Element

2. Program to check a Binary Tree is BST or Not
   Inputs: A Binary Tree, BT
   Outputs: Indicate whether BT is BST ot Not

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Home-work:

1. Implement Balanced BST (AVL-Tree) ADT
   Operations:
   - (a) Find Maximum and Minimum
   - (b) Find any Element
   - (c) Insert an Element
   - (d) Delete an Element

2. Correct the BST if only two nodes of a BST are Swapped
   Inputs: An Incorrect BST (where positions of only two nodes are swapped)
   Outputs: The corresponding Correct BST
   Hint: Simple method   =>   O(nLogn) time and O(n) space
             Efficient method   =>   O(n) time and O(n) space