Lab test 3
CSE 4304
03-08-2021
SWE B

Q1: Implement the following functionalities of a binary search tree: (50+50+50)

i. Insert a new element. Count the number of operations needed to insert a new value.
ii. Remove a certain node.
iii. Traverse the tree using inorder traversal method.

Q2: Generate 100 random integer values and store them either in a file or in an array. Then insert one by one to generate a binary search tree. Find the number of operation f(n) needed for inserting each element (n = 1, 2, 3….100). Plot the value in the provided excel file by replacing the values in the f(n) column (which contains dummy data now). (45)

Try to figure out the relationship between n and f(n). (5)

Instruction:
Do not copy code from anywhere. Write down every single line of code by yourself. Once you start writing your solution, DO NOT take any help from any sources or person. Only submit whatever you can write by yourself. Zip your source codes, input files (if any), excel file and other answer files (if any) and rename by adding your student ID at the beginning. Rename individual files by adding your student ID at the beginning as well.

Penalty for unfear means:
For any kind of unfear means, your test will be cancelled, and **you will be banned from ALL of the upcoming lab tests** as well (which will most likely lead to fail in the lab)