COSC 2007: Data Structure II

Assignment#2

Write the details algorithm and convert into java code for the solution of Binary search Tree

- 1- Construct a binary search tree to keep the records of the student's names. You can insert the name of students that should follow the rules of binary search tree until press character 'N'.
- 2- Perform the search operation to find the particular student.
- 3- Delete any one leaf node student
- 4- Delete any one student with one child node
- 5- Delete any one student with two child nodes.
- 6- Perform the pre-order traversal
- 7- Perform the in-order traversal
- 8- Perform the post-order traversal

Strategies to be used:

• Binary search tree technique

Methods/Functions: You can define any number of methods as you like.

Output: You should display the output for all tasks 1-8.

What to submit: The submission is Assignment2

How to submit an Assignment: You can prepare a document either text file or pdf file. Course name, Student name, and student number should be written at the top of a report. You can submit assignment through Assignment#2 from your Moodle account. **You have to submit java source file too.**

Submission Due: The submission due is February 17, 2024.

Submission Report Format:

Assignment1

<Course Name>

<Student Name>

<Student Number>

Exercise No

<Type the question here>

Algorithm/ Pseudocode Code Three Output Conclusion

Note: Late submission will be marked as 0.