# California State University, Fresno

# DEPARTMENT OF COMPUTER SCIENCE

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| Class: | **Algorithms & Data Structures** | | | Semester: | **Fall 2021** |
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| Laboratory number: | **Lab 8** | | |
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**1. Statement of Objectives**

In this lab we will be studying about the Binary search tree. We will implement the topics mentioned in the lab and check for results.

**2. Experimental Procedure**

Instead of using “struct node” we have used “class node” this means we will have two separate classes, one of node and other of bst. For nodes we will be needing three different pieces of information. Data, leftchild and rightchild. First, we have implemented and inductive call for insert node in the insert function. This will take care of tree making. Then we have implemented function to get the maximum value. A function to return root and a function to check if the searched element is present in the tree. Also, a print function which prints the tree in preoder.

**3. Analysis**

A screenshot of a computer

Description automatically generated

**4. Encountered Problems**

It would have been easy with implementation of struct node than class of node. There were minor bug problems here and there. It took a lot of time in the constructors to identify and fix warnings and errors.

**5. Conclusions**

The task was overall fine and the tree implementation with the specifies header file was easy.

**6. References**

List the references used in this report.