# CS 311 - HW 7 - 100 points

## **Binary Search Tree**

Write a **Binary Search Tree** application program to work with Binary Trees.

### **Steps:**

- 1. Refer to **Lecture 14** for the description and implementation of Binary Search Trees functions.
- 2. Complete the attached **binstree.cpp** and test it with client program **HW7client.cpp** (remains unchanged). Enter the results to your **test1.txt**. Make sure the output is what you expected/drew. Check the results carefully.

#### **Submission**

Submit a zip file containing the following files.

1. binstree.h (0 points) -- BST class header file (Do NOT change it)

2. binstree.cpp (95 points) -- BST class implementation

3. HW7client.cpp (0 points) -- the implemented application (Do NOT change it)

4. test1.txt (5 points) -- results of Test1

Important note1: You will miss up to 10 points if you don't comment your programs. Important Note2: Always make sure the files you submit can be compiled on **empress.csusm.edu** with no error. We will compile and test your files on empress.

#### Note:

We will extend this program in HW7 EC (Extra Credit) for height balanced trees.

In binstree.h, struct Vertex, two elements Height and Balance have been defined, which will be used for HW7 EC. In HW7, we assign 0 to these two elements and never change them. But in HW7 EC, you will change their values.