

Lab 6

This lab comes to us from PSU, and has been used in their proficiency demo practice. No modification is made to this lab so that you get familiar with the format of the test.

Start with the code in `~l1iang/cs260/labs/lab6`. You will want to copy it into a directory of your own.

File `supplied.o` contains code that can build, display, duplicate, and destroy a *binary search tree*.

For this lab, you will need to write the following three functions in `table.cpp`, and add function prototypes for them to `table.h`.

- `int count(node * root)` *Recursively* compute and return the number of nodes in the bst.
- `int sum(node * root)` *Recursively* compute and return the sum of the ints contained in the bst.
- `int height(node * root)` *Recursively* compute and return the height of the bst.

Create a makefile for the project and build it.

For lab6 submission, copy the member function `int height(node * root)` implementation into `lab6.txt`, then append the output of the app to the file. ftp `lab6.txt` to your local machine and upload it to the Desire2Learn dropbox.

```
./app >> lab6.txt
```