## Programming Exam Choice 24

Start by downloading the question 24 files from the moodle into a new directory on your machine. You will be changing the code in the question24.cpp file. You have a Makefile to handle building this code. (I have included my solution code for the binary search tree here, but you can't easily read it because it's in an .o file. That's so you can trust the basic functions to work.)

## Part 1. 5 points

You will complete this function to sum all the numbers in a binary search tree:

```
int tree_sum_recursive(const binary_tree_node* root_ptr)
{
}
```

If the tree is empty, its sum is 0.

## Part 2. 5 points

After that, complete this second function to find the height of a binary tree. An empty tree has height 0.

```
int tree_height_recursive(const binary_tree_node* root_ptr)
{
}
```

Upload your question24.cpp file to the moodle when done. Your TA may ask you to zip other files in as well.

Logic of problem laid out in comments: 50%
Code compiles with no errors or warnings: 10%
Code has no run time errors: 10%
Code gives correct answers for all inputs: 20%
Code is clean and easy to read: 10%