# CIS*2520 Data Structures

Fall 2014

## Assignment 1 Guidelines

Assignment 1 is due on Friday September 26, 2014.

You can develop your programs using any C system, as long as your programs can be correctly executed on the Linux system in SOCS.

You are allowed to use standard library functions. The assignment should be submitted as a tar file containing the source code for each question as well as a readme file. There should be a main program (main.c) that calls the other three functions (carbon.c, ackermann.c and newton.c). There should also be a makefile to compile the programs. Your submission may include something like

readme.txt main.c, carbon.c, ackermann.c, newton.c, makefile.

Any compilation error or warning will result in a mark deduction appropriate to the severity of the error. There will be some marks allocated for style and documentation, but the majority will be for the execution of the programs.

Each file should have a comment at the beginning containing your name, id, the date, and the assignment name.

For the readme file, it should contain the following:

- name, id and assignment number
- a brief description of how to run each program, e.g. any command line arguments needed.
- sample output demonstrating the proper functioning of the program.

For each of the C files, any function should have a brief comment describing its purpose. Also, any section of code where it is not easily apparent what the code does should have a short comment. Don't forget indentation.

For Question 3 of A1, function *time()* can be used to track the system time usage of a program. You can use this function to measure the execution time of a program with different arguments.