Lab Purpose

This lab will give you practice using *BGLinux* commands, the *pico* editor and working with C++ programs.

When you are finished with this lab you should be able to do the following on BGLinux:

- login and logout of your *BGLinux* account
- use basic *unix* commands like cat, cd, cp, cslpr, ls, photo, pwd
- get to your class directory and back to your personal directory
- copy a file from the class library to your class account
- use the *pico* editor to create or open a C++ file, modify it and save it
- compile a C++ program and run it
- correct syntax errors in a C++ program

Always bring to lab

1. Lecture notes, handouts from Canvas, and/or the Gaddis book.
2. USB Flash drive(s) or other storage media.

Mandatory Instructions

Part A. Edit, debug and compile a C++ program.

1. Log into your BGLinux account using PuTTY.
2. Switch to cs2020-jc directory.
3. Copy lab1.cpp from the lib directory into your cs2020-jc directory. That's your starting point.
4. Open the *lab1.cpp* file in the *pico* editor by typing the command: **pico lab1.cpp.**
5. Add a linear search function to find given account number. Prototype and a stub for this function is given in the seed file.
6. In the *main* function, add a sentinel-controlled loop to allow the user to check as many account numbers as he/she wishes. While the account number entered is not equal to the sentinel value (-1), report whether the account number is valid or not and let the user enter another number. When -1 is entered, no message about the account number should appear.
7. Compile, debug, and run your program until you are sure that it is working correctly.
8. Test your program with values that are found in the arrays and values that are not found in the arrays.

What to turn in?

Once your program displays the output correctly, create a new photo log file called *lab1.log* by typing in these commands at the $ prompt:

$ photo lab1.log	Starts the photo utility and captures all screen output in the file *lab1.log*
$ ls -l	Use a lower-case L, not the number one to see a list of the files in your account in the "long" format (showing size, date modified, etc.)
$ cat lab1.cpp	Displays your program on the screen
$ g++ lab1.cpp	Compiles your program
$ ./a.out	Enter these account numbers: **845, 222, 555** followed by -1 without re-running the Program each time.
$ [Ctrl]-d	Press the **Ctrl** and **d** keys at the same time to end the photo session

You are done! Now complete the grade sheet and upload to Canvas.