CptS 223 Micro Assignment #1 - Hello World!

For this micro assignment, you will be getting your development environment started up, making sure you have access to the tools, and getting your toes wet with Linux.

In this tarball is a directory called "HelloWorld". The program and Makefile there should build and run just fine on the EECS SSH servers. Your job is to:

1) Login to the server via SSH - requires a working EECS account!
2) Copy the tarball there using SCP
3) Untar the tarball
4) Go into the directory
5) Build, Test, Clean, and Build the program
6) Edit the program to put your name and WSU ID in instead of "Anonymous"
7) Build the program
8) Take a screenshot of the program after it's been run
9) Upload the screenshot to Blackboard

For a Linux user, this is a 3 minute job. For someone learning about the environment, it can take much longer, so start early and be prepared to Google or get help as needed.

First: make sure you have a working EECS account. If you're in doubt, go to the ISG offices on Sloan 3rd floor and get them to ensure it's working. This is the same account you would have used in the 121/122 labs, but it's good to check early on this one.

Second: get a working SSH and SCP client for your preferred system. Linux and OSX have these built in on the command line, but Windows will need some help via these tools (others work, but these are just the ones I use):

1) PuTTY - SSH client
2) WinSCP - SCP (file copy over SSH) client

PuTTY gives you a console (terminal) for your session. WinSCP lets you copy files back and forth.

Third: Untar the tarball using the tar program. The command you'll need is:

```
tar -zxvf HelloWorld.tar.gz
```

Fourth: Change into the directory:

```
cd HelloWorld
```

(Look at the files there):

```
ls
```

Fifth: Build the program, run tests, execute the program, clean up, then rebuild just 'cause:

```
make
make test
./HelloWorld
make clean
make
./HelloWorld
```

Sixth: Edit the program source to put your name and WSU ID in. Currently there's a string that's set to the string "Anonymous". Replace that with your name and WSU ID. This will require you to edit the file. You should do this in the terminal. The most common tools available (any of them will work) are: vi, emacs, and nano. Both vi and emacs are powerful and feature-rich tools that will make you a better person, but nano is much easier to learn quickly. All of them have plenty of tutorials online and other resources via Google. The command to fire up nano would be:

```
nano helloworld.cpp
```

Seventh: Build the program again

```
make
```

Eighth: Take a screenshot of the terminal with the various commands executed. On Windows there's the "snip" tool, Linux GUIs have various options, and I know OSX has something built in. You can always push the "Print Screen" button on your keyboard and see what happens too. That's actually what it's there for!

Finally: Upload the screenshot file (ideally as a PNG or JPEG) to Blackboard

Grading

Your submission will be graded based on the following:

1. [10] Your screenshot looks good with your name in the results

Due Date

This assignment must be submitted through Blackboard on Monday January 16th before midnight.