Follow these instructions to complete lab 01.

1. Log on to the Windows machine in front of you using your PODS userid and password.

2. Open a web browser and navigate to the class web page at:
    http://www.cs.binghamton.edu/~tbartens/CS211_Fall_2019/

3. Click on the "How To Do Things" hyperlink. On the "CS-211 How To Do Things" page, click on the "How to Use the Linux Lab" page.

4. Follow the Directions under "Connecting to a Virtual Desktop", until you get a Linux Desktop.

5. Right click within the Linux Desktop and choose "Open a Terminal Window"

6. In the terminal window, type the command:
        mount
     And look at the results. You should find an entry that contains:
        "//bushare.bu.binghamton.edu/*userid*$"
    where *userid* is your PODS userid. If you do not find such an entry, contact the CA. (You don't have a network U-Drive.)

7. In the terminal window, type the command:
        cp /etc/skel/.bashrc .
    (Note… there is a blank after "cp", a dot before "bashrc", a blank after "bashrc", and another dot after that second blank.) Then hit enter. This will create an initialization script that will be used to set up your Linux environment every time after you log on.

8. Disconnect from your Virtual Desktop (See the instructions on the "Using VMware" web page, which you can see if you click on "Restore Down" – the two overlapping squares in the upper right corner of your screen.) Then reconnect. (This time, the initialization script will be used.)

9. Again, right click on the desktop and open a terminal window. Type the following commands in the terminal window:
        mkdir cs211
        cd cs211
        mkdir lab01
        cd lab01
    The "mkdir cs211" command makes a cs211 subdirectory in your U-Drive. The "cd cs211" command makes that sub-directory your "current" directory. The "mkdir lab01" command makes a lab01 sub-directory of your current directory (cs211), and the "cd lab01" makes the lab01 sub-directory the current directory.

10. Now, type the following command in the terminal window:
        gedit helloWorld.c&
    This starts the "gedit" editor on a new file called "helloWorld.c". The ampersand at the end of the command tells Linux to keep the editor independent from the terminal window, so that you can edit the file and still use the command window.

11. In the editor window, type the following lines:

```
#include <stdio.h>

int main() {
        printf("Hello World from name\n");
        return 0;
}
```

Where *name* is your name. Save your file.

12. In the terminal window, type the command:

```
cat helloWorld.c
```

You should see the text as specified above. Then type the compile command:

```
gcc -g -Wall -o helloWorld helloWorld.c
```

and hit enter. If you get any messages, fix the problems indicated by the message by changing the C program, saving the changes, and re-running the gcc command.

13. Once your program compiles with no error messages, run your command by typing:

```
./helloWorld
```

When you hit enter, the line "Hello World from *name*" should appear in the terminal window. Congratulations! You have just coded, compiled, and run your first C program!

14. Open a Web Browser in the Linux window, and navigate to myCourses/CS-211 A 0.

15. Click on "Content" in the left menu, and select the "Lab Submissions" folder, and then the "Lab 01 Submission" hyperlink. This will open a submission page. On the submission page, find the "Attach Files" area, and click on the "Browse My Computer" button. Navigate to cs211/lab01, and select "helloWorld.c". Then click on the "Open" button. When you return to the submission page, don't forget to click on the "Submit" button at the bottom left of the page.

16. Close all the applications running in your Linux Window, exit Linux by hitting the On/Off button, shut down the web browser in Windows, and sign off from Windows. You're done!

Grading Criteria:

- 10 points (full credit) if everything is correct and your program compiles and runs correctly
- -1 point if there are compiler warning messages with the -Wall gcc option
- -2 points if the submitted file is not "helloWorld.c"
- -5 points if there are compiler error messages
- -2 points if the resulting command does not print a valid message
- -2 points per 24 hours if the submission is late