EE 480

PROJECT 1 - RPI SETUP

Note: Projects must be completed individually. Plagiarism will result in receiving no credit for the assignment. Due date for this project can be found on the course website schedule. Use the upload form link on the course website schedule to submit this project.

This project focuses on setup of the RPi that you will use throughout the class. Follow the tutorials from the official RPi website, as well as the video posted on the course website to setup your RPi and connect it to your home network.

Once you have successfully setup your RPi:

Change the default password. The RPi is a very common embedded system device and (almost) all RPi's use the Raspbian operating system with the "pi" username and "raspberry" password. You can change the username "pi" password by using the **passwd** command in the terminal window. It will prompt you to type a new UNIX password. **NOTE:** as you type your new password, it will not appear on the screen. You'll retype the password to make sure it's correct before it is officially changed.

Install programming languages

1. Python3 - check the version of python by opening the terminal window and typing "python - -version". If python2.x in installed, you can remove it by typing "sudo apt autoremove python". This will require your (new) password. You can now install python3 with the following command "sudo apt update; sudo apt install python3".
2. C/C++ You will need to use the terminal window to install the gcc/g++ compiler.

Once you have the programming languages installed, write two small test, "hello world" programs. Write one test program using python3 and the other using C or C++.

Deliverables (in a single text document):

1. photo of your functional RPi setup.
2. Screenshot of your Python3 hello world program output.
3. Screenshot of your C/C++ hello world program output.
4. Describe your approach to this project. List any problems that you've encountered and how you overcame these issues.