CS 362 Lab 9 Spring 2019

Learning Goal:

- Have an arduino communicate with a PC.

Prelab:

Complete the tutorial on graphing analog input located at http://arduino.cc/en/Tutorial/Graph

Another tutorial showing the basics of using the Arduino and Processing together is here: https://learn.sparkfun.com/tutorials/connecting-arduino-to-processing#introduction

Software :
Download processing from here https://www.processing.org/download/?processing

Lab: Due Wednesday 4/10/2019

Connect two analog devices to the arduino and plot the data received on the computer using processing.
Data could be displayed in two separate graphs or both on one graph.

Some analog devices that you might already have include:

- potentiometer
- thermal sensitive resistor
- photo resistor
- force sensitive resistor

Lab needs to be checked out, and the code (both Arduino code and processing code) submitted to Gradescope.

Note : Processing might not be installed on lab computers . So you might need to bring your personal laptops to get the lab verified.

To be considered completed "on time", this Lab needs to be demonstrated by end of Lab on Wednesday 4/10/2019. Your code must be submitted to Gradescope BEFORE you demo your lab!

Late Policy

- Late Submission - Submitted and/or demonstrated later that week (before Friday 4/12/19 11:59pm) 25% Penalty
- Late submission – Submitted and/or demonstrated during the following week (before Friday 4/19/19 11:59pm) 50% Penalty

What should I include with my .ino Code File?

As with any code file, it should be written in Good Coding Style: in a manner that will help other people read and understand the intent, purpose, operation of the code. So your code must include:

- Name the .ino file with your NetId and Lab Number
    - I.E. something like: ptroy4Lab2.ino

- Header Comments (including the following)
  - // FirstName LastName, UIN and NetID
  - // Lab x - Title
  - // Description - what is this code supposed to do?
  - // Include any assumptions you may have made, what do you expect from the hardware, pinouts, particular arduino versions, etc.
  - // References - where did you find code snippets, ideas, inspirations? if no references used say: "no references used"
- Code is well documented/formatted with comments, indentations, and descriptive variable names
- Actual code - the functions in the cpp/ino file

Academic Integrity Guidelines:
You may use any resources linked from this lab, or posted by the professor or TAs on piazza/class web page/etc. You should not look at any other internet resources for this. This is an individual assignment, and should be completed on your own. You should not show anyone your code, or look at anyone else's code.