

Prelab Demonstration 1

Kieran Cosgrove

1. To allow my code to be ready to run during lab, I made code changes & tested it on my Arduino. I am now able to bring in two voltages from my Arduino into my csv file and read it in my analysis. Below are my code changes and example of the csv file working:

```
const int pin0 = A0;           // Pin use to collect analog data from potenitometer
int analogVal0 = 0;           // variable to store potentiometer data [ints]
float voltage0 = 0;           // variable to store potentiometer voltage [V]

const int pin1 = A1;           // Pin use to collect analog data from potenitometer
int analogVal1 = 0;           // variable to store potentiometer data [ints]
float voltage1 = 0;           // variable to store potentiometer voltage [V]

analogVal0 = analogRead(pin0); // get analog data from pin
voltage0 = (float)analogVal0*int2volt; // convert to volts

analogVal1 = analogRead(pin1); // get analog data from pin
voltage1 = (float)analogVal1*int2volt; // convert to volts
```

```
#-----#
dataNames = ['Time', 'V1', 'V2']
dataTypes = [ '=L', '=f', '=f']
fileName   = 'Demo_1_trial_1.csv'
# ----END-EDIT-----#
```

```
Demo_1_trial_1.csv
Time,V1,V2
0.0,1.5200390815734863,1.2170088291168213
0.00954799999999878,1.6177908182144165,1.5053763389587402
0.019988999999998924,1.6568914651870728,1.6568914651870728
0.029567999999997596,1.6568914651870728,1.681329369544983
0.03999199999999803,1.7204301357269287,1.8132941722869873
0.04957599999999829,1.686216950416565,1.7253177165985107
0.05993999999999744,1.7399804592132568,1.823069453239441
0.06960699999999775,1.7204301357269287,1.842619776725769
0.07992799999999889,1.7057673931121826,1.774193525314331
0.08962599999999991,1.7350928783416748,1.827957034111023
0.09991999999999734,1.759530782699585,1.7839686870574951
0.10962199999999811,1.779081106185913,1.7839686870574951
0.11990000000000073,1.759530782699585,1.759530782699585
```