Instructor: Michael D'Argenio Electrical Engineering - Term 1 Assignment: Rock Paper Scissors

## **Materials**

• Arduino Uno

## Background & Set-Up:

https://en.wikipedia.org/wiki/Random\_number\_generation

https://en.wikipedia.org/wiki/Rock%E2%80%93paper%E2%80%93scissors

Leveraging your previous random number generator, can you make it randomly choose between rock-paper-scissors so you can play your Arduino at rock-paper-scissors?

You will set up the Arduino to communicate with your computer using the Arduino's serial port bus that communicates over the USB connection. Use the Arduino-PC Serial Comms starter code to see how to set up the connection. To send a message to your Arduino from your PC, open the serial port monitor (Tools->Serial Port Monitor). Double-check to make sure the settings match your parameters you set up in your program.

## Goal:

We want to write a program for the Arduino where we can rock-paperscissors with it. You will input a message stating your choice (either rock, paper, or scissors) and the Arduino will output its random choice of weapon. The Arduino should also output a message saying something like "you win!" or "you lose!"

Input: "scissors"

Output; "paper. I'll get you next time!"

Input: "scissors"

Output: "rock. Haha you lose!"