**Assignment 6.1: Report**

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**YouTube Links:**

<https://www.youtube.com/watch?v=A10_CDlripI>

<https://www.youtube.com/watch?v=CR3yeDTi4bc>

<https://www.youtube.com/watch?v=YV37WkSUcjw>

<https://www.youtube.com/watch?v=sKUghtzxO-E>

<https://www.youtube.com/watch?v=VMn36sXLfzE>

<https://www.youtube.com/watch?v=guBrI_Whs3o>

<https://www.youtube.com/watch?v=XKBRnLurRr0>

**Description:**

In this lab, we covered serial communication with an ATmega328. We initially set up firmware to send the value of a potentiometer to a serial monitor, such as RealTerm, PuTTy, or the Arduino Serial Monitor. Next, we formatted the display so that it looked neater, still sending the potentiometer values. Then, we set up the ATmega328 to echo back data that we sent it, which led into sending commands from the serial monitor to toggle an LED connected to the chip. Next, we set up the ATmega328 to receive commands from the serial monitor to control an RGB LED. Finally, we set up the chip to communicate with Processing Sketches, allowing us to first control the color of the Processing application, and then to have the Processing application control an RGB LED.