CPE301 – SPRING 2019

Design Assignment 4B

Student Name: Carlos D Zuniga

Student #: 2000783713

Student Email: zunigc2@unlv.nevada.edu

Primary Github address: https://github.com/cdaniel64/blassen/

Directory: DA4/DA4B

1. **COMPONENTS LIST AND CONNECTION BLOCK DIAGRAM w/ PINS**

List of Components used

Block diagram with pins used in the Atmega328P

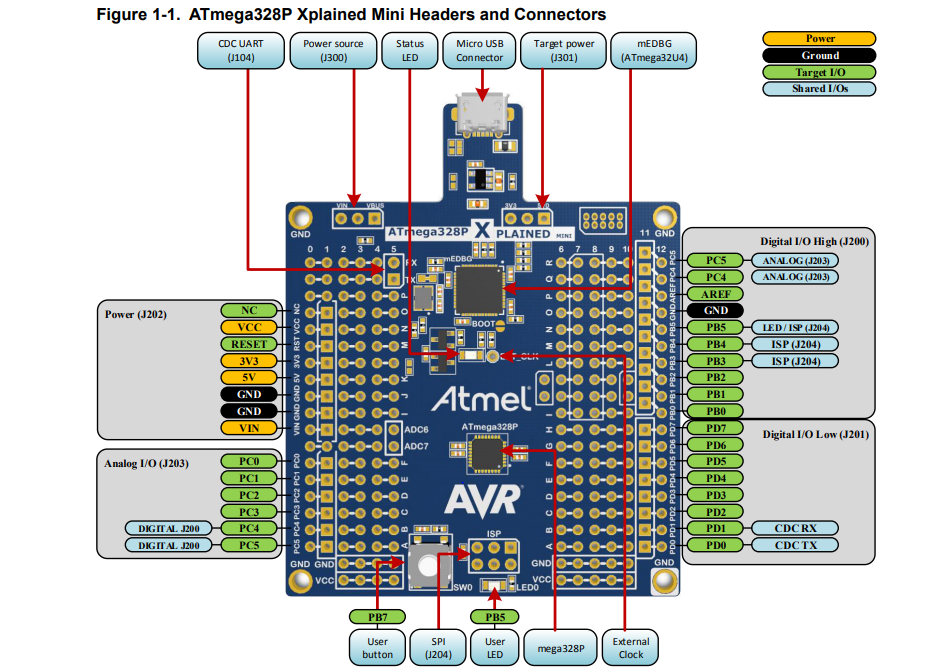
Motor Driver

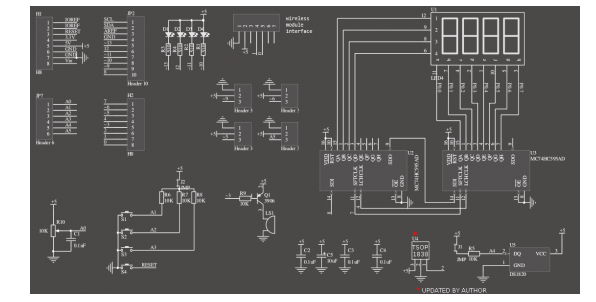
Potentiometer (to regulate motor speed)

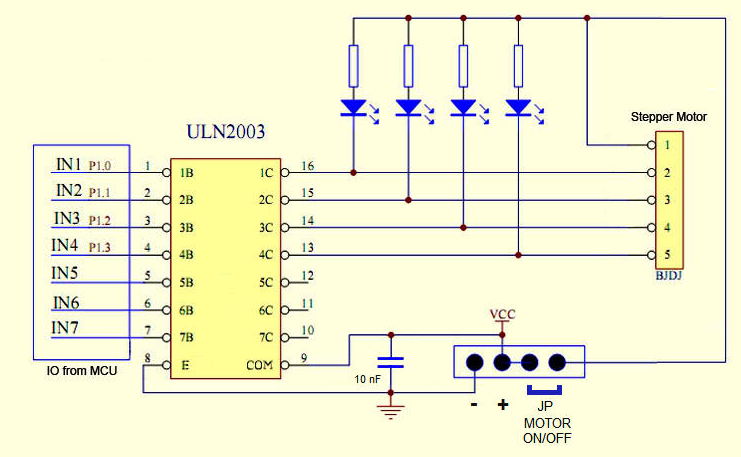
UNL2003 Driver Breakout Board

Stepper Motor

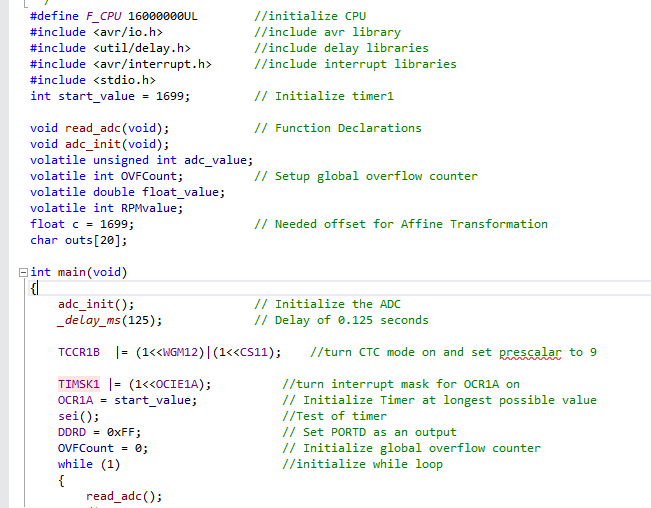
Servo Motor

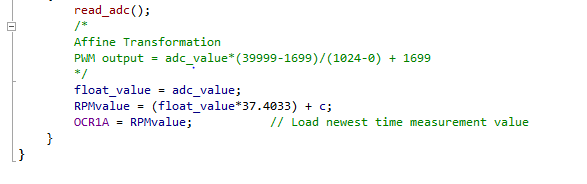


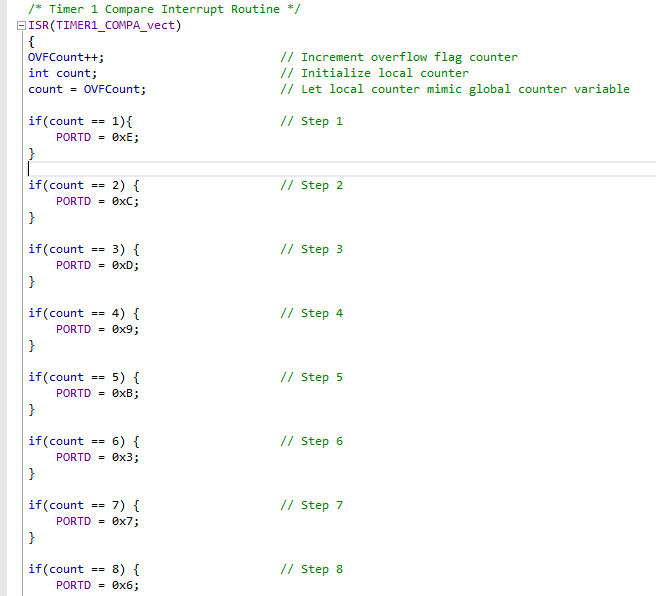


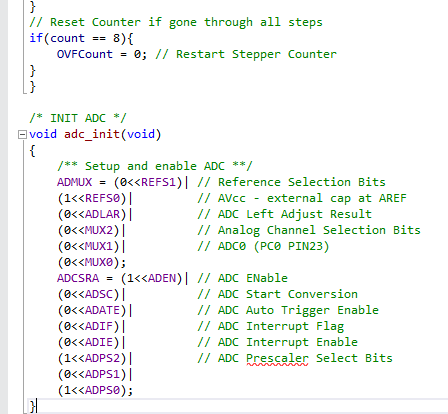


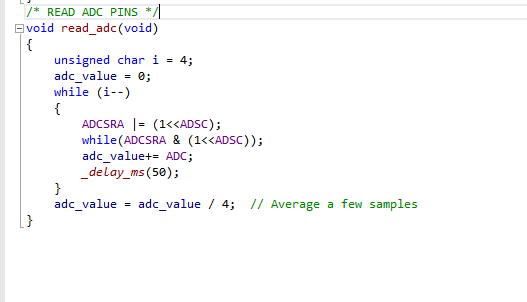
1. **INITIAL/MODIFIED/DEVELOPED CODE OF TASK 1/A**



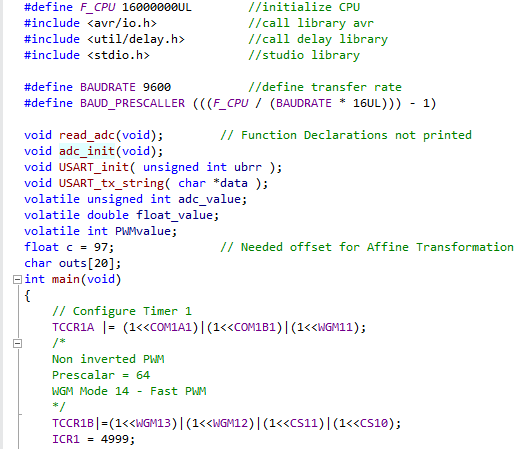


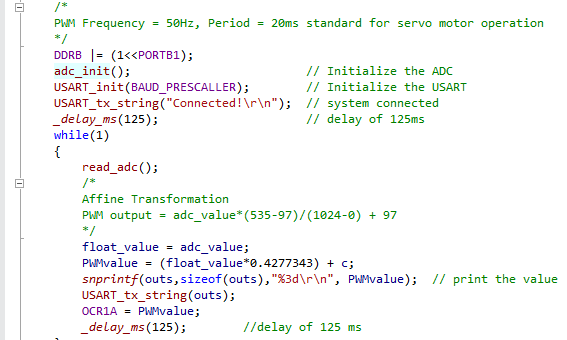
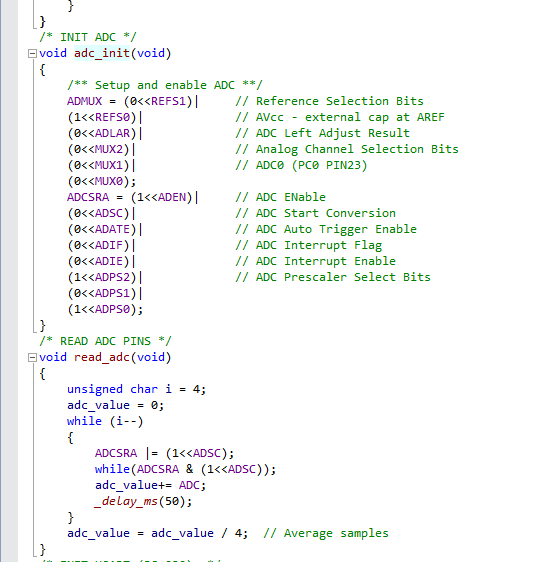


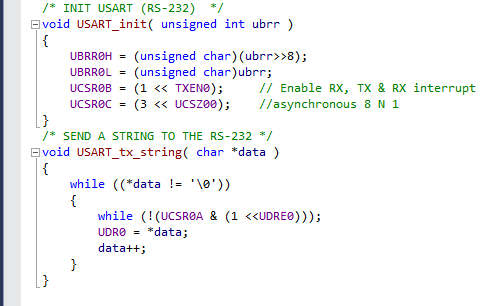




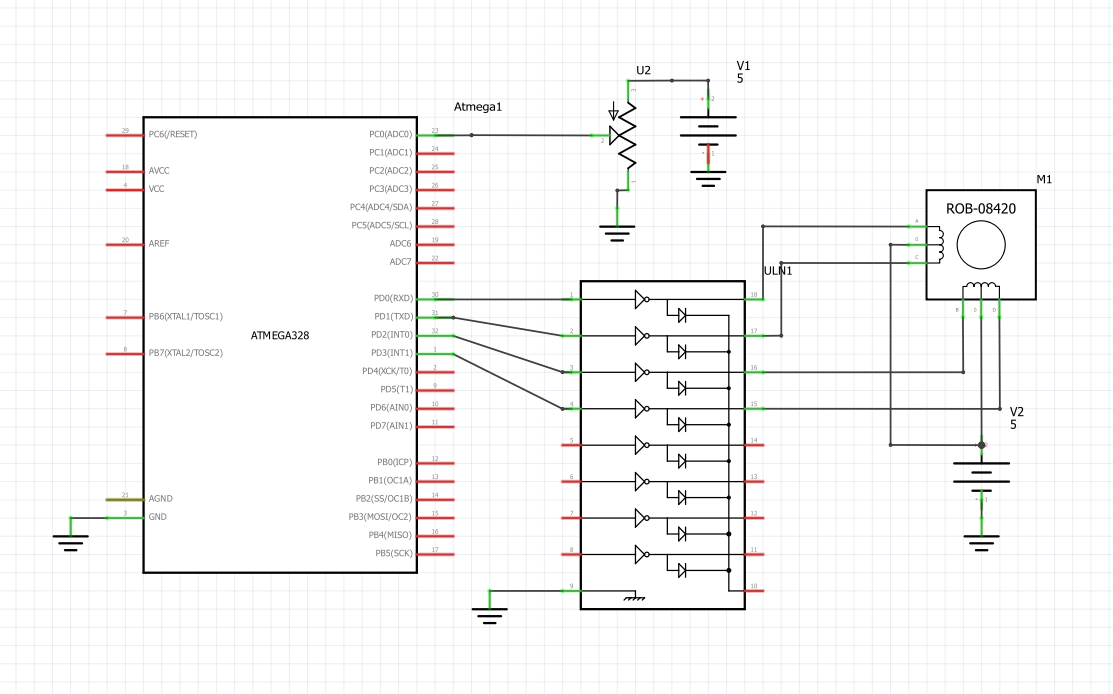
1. **INITIAL/MODIFIED/DEVELOPED CODE OF TASK 2/A**

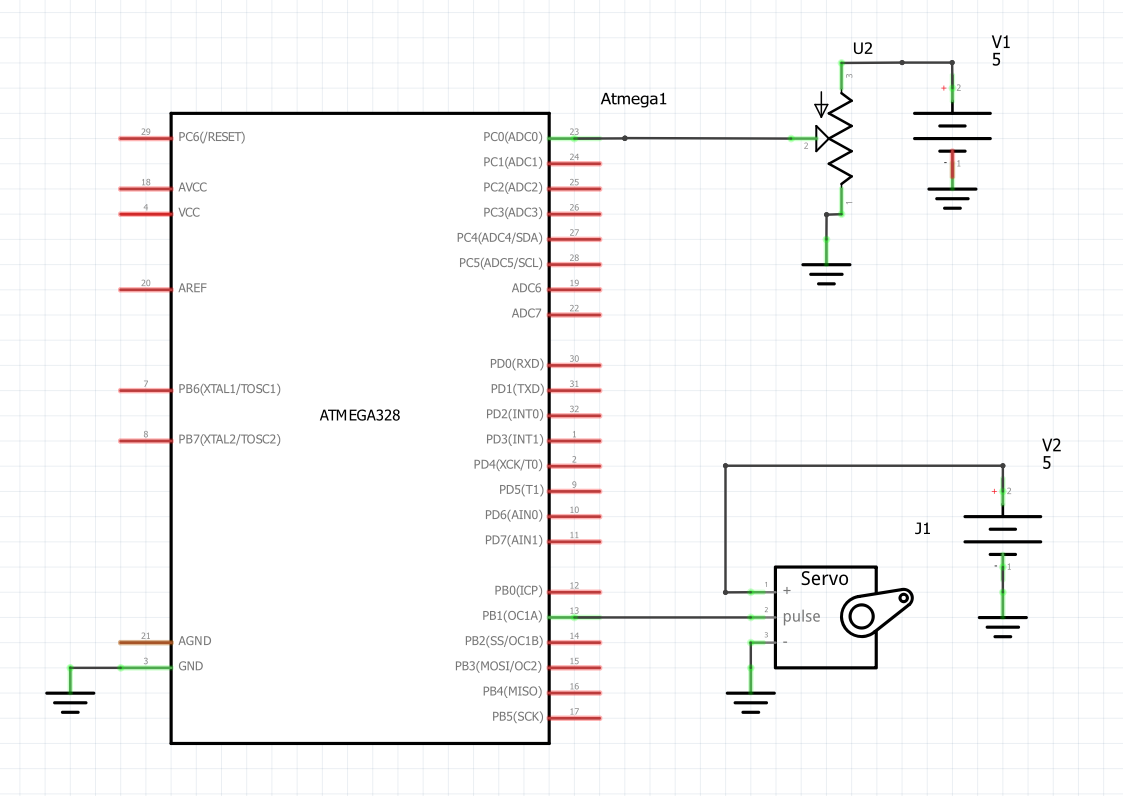


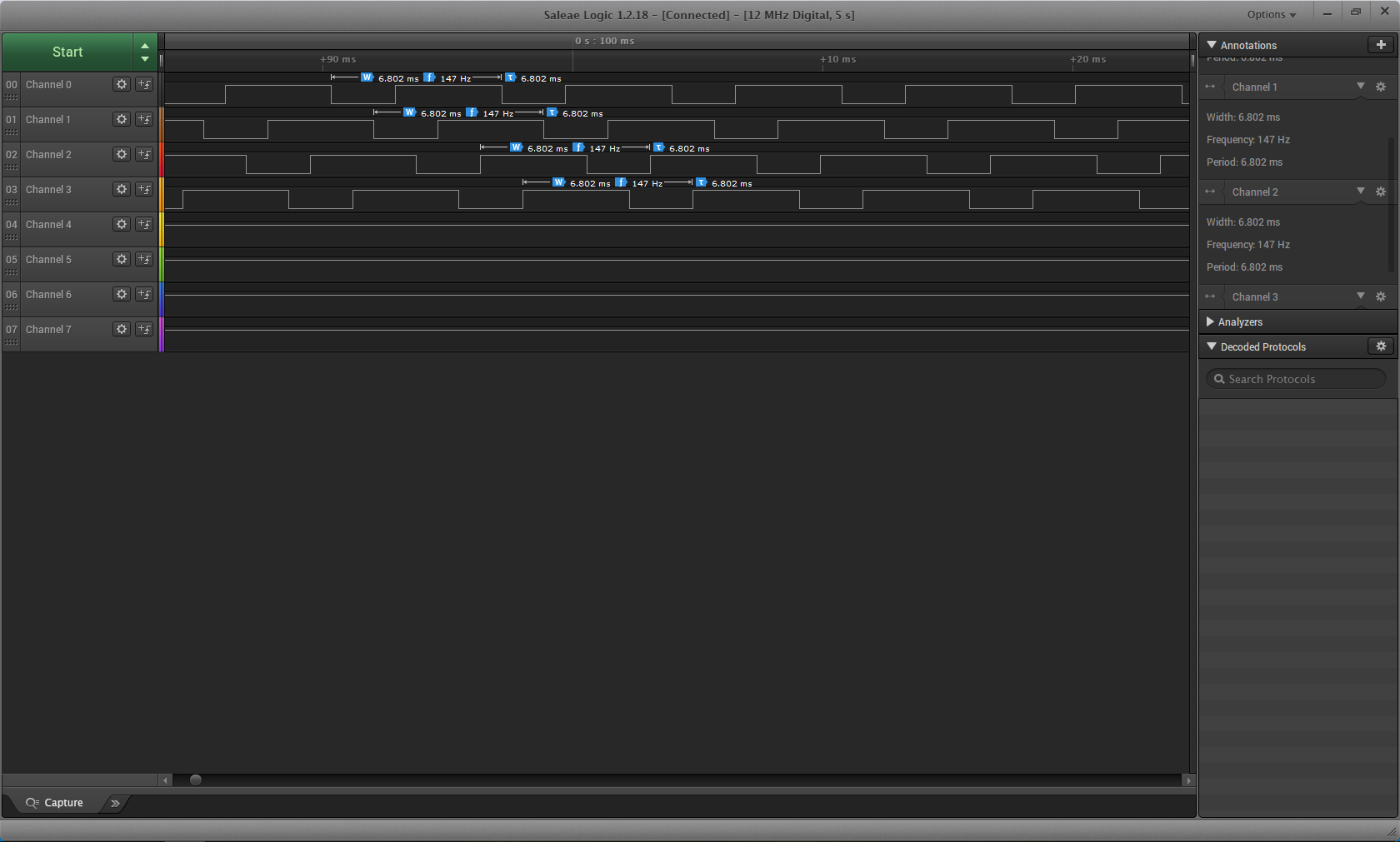


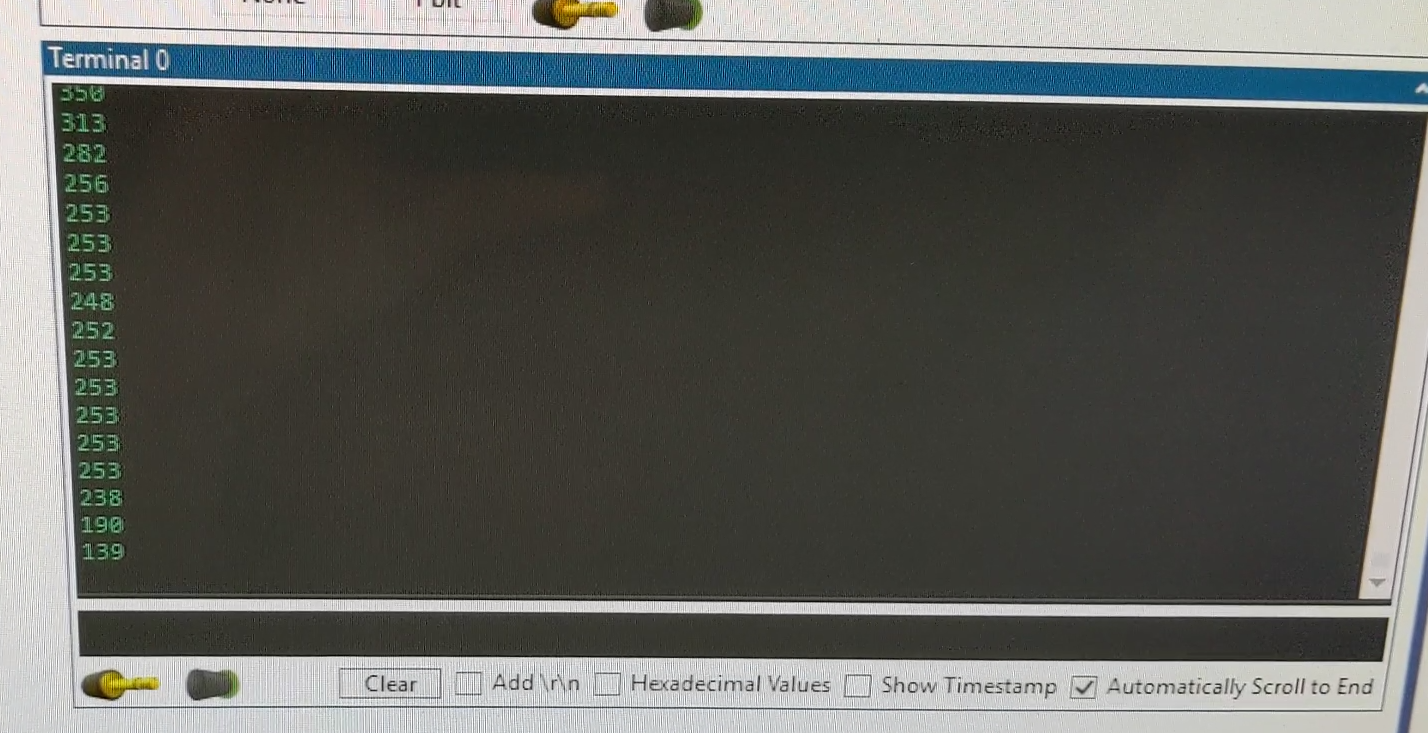
1. **SCHEMATICS**



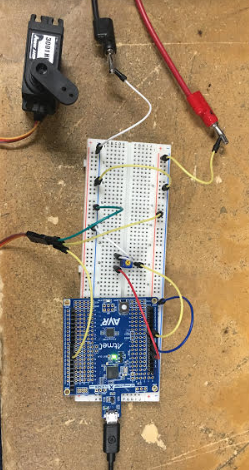
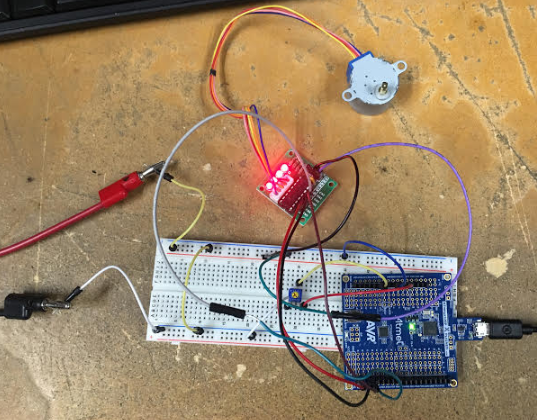


1. **SCREENSHOTS OF EACH TASK OUTPUT (ATMEL STUDIO OUTPUT)**

**Task1**

Task 2

1. **SCREENSHOT OF EACH DEMO (BOARD SETUP)**



1. **VIDEO LINKS OF EACH DEMO**

<https://youtu.be/IL6CzIUtaRg>

1. **GITHUB LINK OF THIS DA**

<https://github.com/cdaniel64/blassen>

**Student Academic Misconduct Policy**

<http://studentconduct.unlv.edu/misconduct/policy.html>

“This assignment submission is my own, original work”.