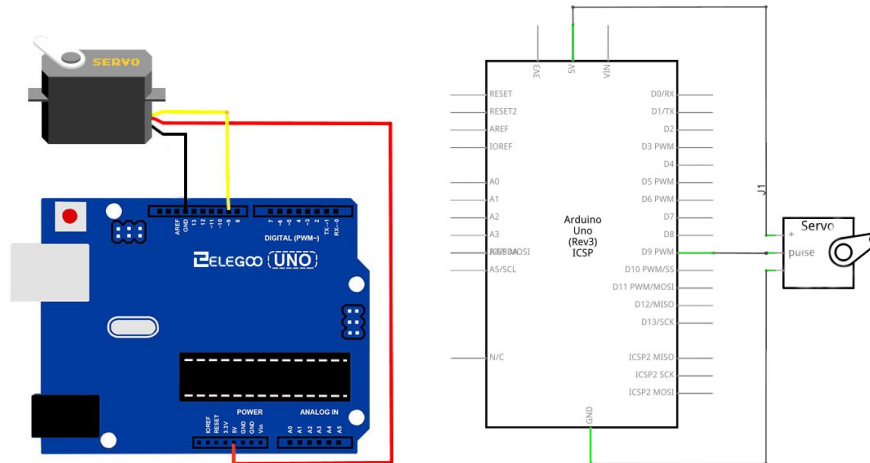


Programming the UNO to Control Servomotor and DC Motor

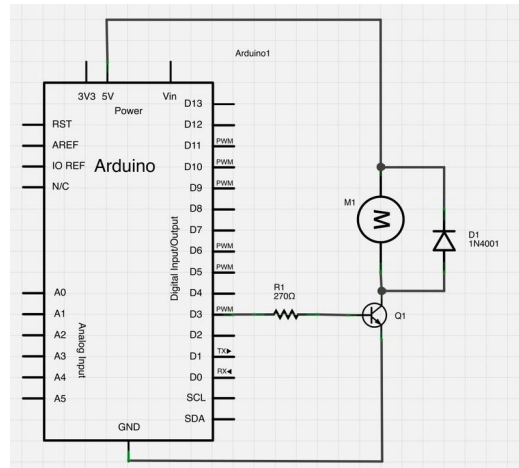
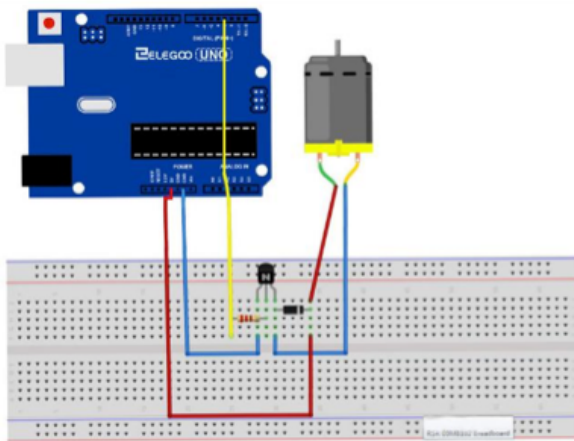
Names: _____

Servomotor



1. Write program such that UNO sweeps servomotor back and forth between 0 and 180 degrees in 1-degree steps with small amount of time between each step.
2. Write a program such that the UNO controls the servomotor via the joystick where "left" is mapped to 0 degrees and "right" is mapped to 180 degrees. What are functions and commands used? Give a brief description of each of them.

DC Motor



3. Write a program such that the UNO sweeps the speed of the DC motor from stopped (0 PWM to full speed 255 PWM) and back again in increments of 1 held for a short amount of time.
4. Write a program such that the UNO controls the DC motor's speed via the joystick where "centered" is stopped and "right" is full speed. What are the key commands used? Give a brief description of them.