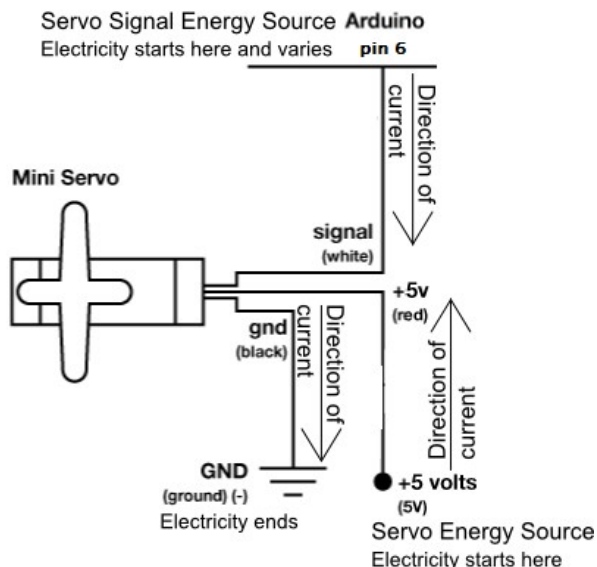# Circuit 4

Explanation:

The servo in this circuit takes electricity from 5V on the Arduino. Pin # 6 on the Arduino supplies a PWM signal which sets the position of the servo. Each voltage value has a distinct correlating position. Finally the electricity reaches ground, closing the circuit and allowing electricity to flow from power source to ground.

Schematic:

Servo Signal Energy Source **Arduino**
Electricity starts here and varies   **pin 6**

Direction of current

Mini Servo

signal
(white)

+5v
(red)

gnd
(black)

Direction of current

Direction of current

GND
(ground) (-)
Electricity ends

+5 volts
(5V)
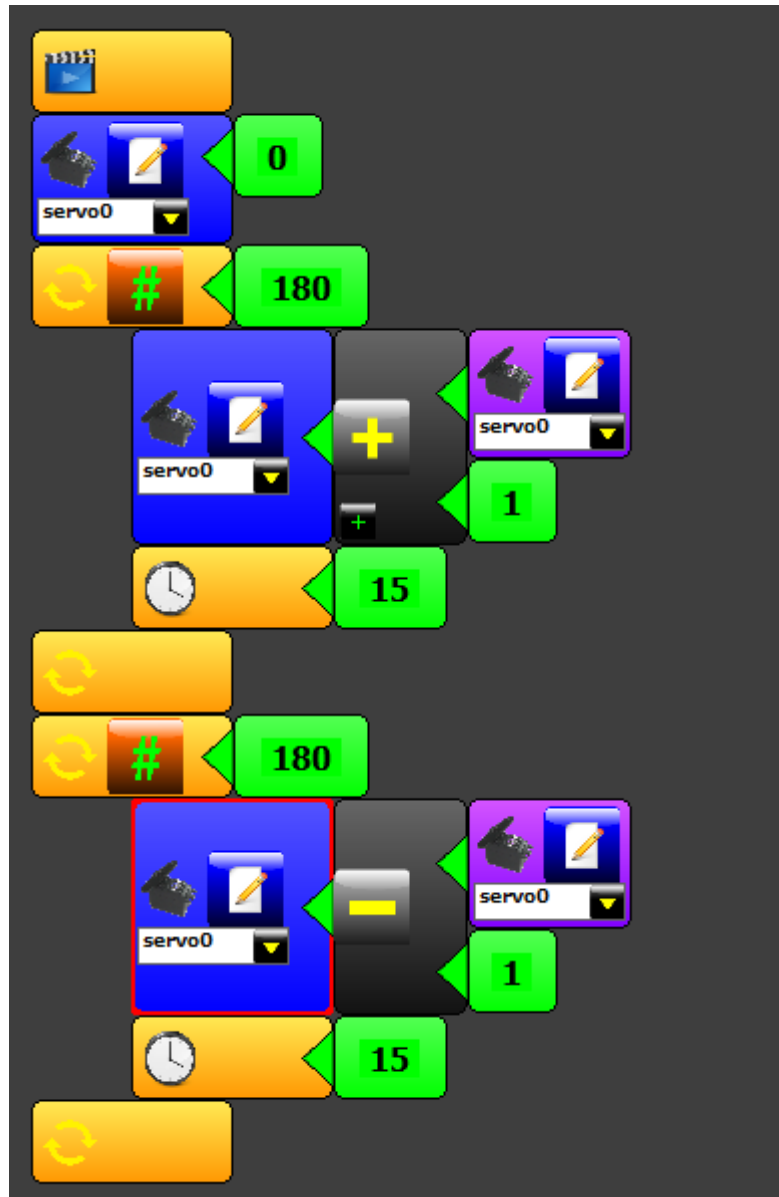Servo Energy Source
Electricity starts here

Components:

Arduino Digital Pin #6: Signal power source for servo.

Servo: Sets the position of the servo arm depending on the voltage of the signal received.

+5V: Five Volt power source.

Gnd: Ground

Code:

To some kids this is exciting stuff. There are all kinds of things kids can think to do with servos, you've just got to ask them. Throw out the word "robot" and see what comes back at you. Remember, this is just slightly more complicated output, same as the motor and LED.