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from analogio import AnalogIn
import time
import board
import pwmio
from adafruit_motor import servo

# create a PWMOut object on Pin D3.
pwm = pwmio.PWMOut(board.D3, duty_cycle=2 ** 15, frequency=50)

# Create a servo object, my_servo.
my_servo = servo.Servo(pwm)


angle = 0
change = 0.01

pot = AnalogIn(board.A8)

def rescale(value, val_1_min, val_1_max, val_2_min, val_2_max):
    new_val = (val_1_max - val_1_min) + 1
    new_val_2 = value / new_val
    new_val_3 = new_val_2 * ((val_2_max - val_2_min) + 1)
    final_val = new_val_3 + val_2_min
    return final_val

joystick_x = AnalogIn(board.JOYSTICK_X)
light_sensor = AnalogIn(board.A7)

while True:
    x_val = light_sensor.value
    joy_rescale = int(rescale(x_val, 0, 65535, 0, 180))
    print(joy_rescale)
    my_servo.angle = joy_rescale

```