

```

#include <Servo.h>
#include <Adafruit_CircuitPlayground.h>

Servo myServo;
int degrees = 0;
int direction = 0;

void setup() {
  // Initialize Circuit Playground
  CircuitPlayground.begin();
  // Attach servo to pin A1
  myServo.attach(A1);
  // Set initial servo position
  myServo.write(degrees);
}

void loop() {
  // Get light level from Circuit Playground's light sensor
  int lightLevel = CircuitPlayground.lightSensor();
  // Adjust servo movement logic
  if (degrees == 40) {
    direction = 0;
  }
  if (degrees == 120) {
    direction = 1;
  }
  // Move servo when light level is low
  if (lightLevel < 40 && direction == 0) {
    // Move servo clockwise
    degrees += 2;
    myServo.write(degrees);

    // Light up neopixels blue on the right side
    for (int i = 0; i < 5; i++) {
      CircuitPlayground.setPixelColor(i, 0, 0, 255); // Blue
    }
    for (int i = 5; i < 10; i++) {
      CircuitPlayground.setPixelColor(i, 128, 0, 128); // Purple
    }

    delay(15); // Small delay to control servo speed
  }
}

```

```
else if (lightLevel < 40 && direction == 1) {
    // Move servo counterclockwise
    degrees -= 2;
    myServo.write(degrees);

    // Light up neopixels purple on the left side
    for (int i = 0; i < 5; i++) {
        CircuitPlayground.setPixelColor(i, 128, 0, 128); // Purple
    }
    for (int i = 5; i < 10; i++) {
        CircuitPlayground.setPixelColor(i, 0, 0, 255); // Blue
    }

    delay(15); // Small delay to control servo speed
}
else {
    // When not moving, light up yellow
    for (int i = 0; i < 10; i++) {
        CircuitPlayground.setPixelColor(i, 255, 255, 0); // Yellow
    }
}
}
```