```
/*
  Adapted From: Analog Input by David Cuartielles and Tom Igoe
  Author: Malcolm Knapp
  Project: Light Sensor to LED
  Date: 4/10/14
  Version: 0.1
  Description: This code shows how to use a light sensor to control
               the blink rate of a LED.

 */
// ---------- included libraries ------------
// None - include new libraries here

// ---------- hardware pin defines  -----------
int sensorPin = A0;    // select the input pin for the light sensor
int ledPin = 13;      // select the pin for the LED

// ---------- variable initialization  -----------
int sensorValue = 0;  // variable to store the value coming from the sensor
int delayTime = 0; //variable that holds the delay time in milliseconds
int scaling = 1;
int maxValue = 300;
int minValue = 750;

// ---------- library initialization  ----------
// None -  initialize new libraries here

void setup() {
  Serial.begin(9600);
  //---------- hardware declaration ----------
  pinMode(ledPin, OUTPUT);
}

void loop() {
  // Input
  sensorValue = analogRead(sensorPin);
  // Debugging
  Serial.print("Sensor value: ");  Serial.println(sensorValue);

  // Processing
  //Scaling
  delayTime = map (sensorValue, minValue, maxValue, 0, 1023);
  Serial.print ("Delay in milliseconds: "); Serial.println (delayTime);

  // Output
  digitalWrite(ledPin, HIGH); // turn the ledPin on
  delay(delayTime);
  digitalWrite(ledPin, LOW);   // turn the ledPin off:
  delay(delayTime);
}
```

```
/*
  Adapted From: Analog Input by David Cuartielles and Tom Igoe
  Author: Malcolm Knapp
  Project: Light Sensor to Servo
  Date: 4/10/14
  Version: 0.1
  Description: This code shows how to use a light sensor to control
               the "blink" rate of a servo. In this case "blink" means
               moving between two positions.

 */
// ---------- included libraries ------------
#include <Servo.h>

// ---------- hardware pin defines  -----------
int sensorPin = A0;    // select the input pin for the light sensor

// ---------- variable initialization  -----------
int sensorValue = 0;  // variable to store the value coming from the sensor
int delayTime = 0; //variable that holds the delay time in milliseconds
int scaling = 1;
int maxValue = 300;
int minValue = 750;

// ---------- library initialization  ----------
Servo myservo;  // create servo object to control a servo a maximum of eight servo objects can be created

void setup() {
  Serial.begin(9600);
 // ---------- hardware connections ----------
   myservo.attach(9);  // attaches the servo on pin 9 to the servo object
}

void loop() {
  // Input
  sensorValue = analogRead(sensorPin);
  // Debugging
  Serial.print("Sensor value: ");  Serial.println(sensorValue);

  // Processing
  //Scaling
  delayTime = map (sensorValue, minValue, maxValue, 200, 1023);
  Serial.print ("Delay in milliseconds: "); Serial.println (delayTime);


  // Output
  myservo.write(155);
  delay(delayTime);
  myservo.write(30);
  delay(delayTime);
}
```