

```

// These constants won't change. They're used to give names
// to the pins used:
const int analogInPin = A0; // Analog input pin that the potentiometer is
attached to
const int analogOutPin = 9; // Analog output pin that the LED is attached to

int sensorValue = 0; // value read from the pot
int outputValue = 0; // value output to the PWM (analog out)
int fuckFade = 1;
int fadeAmount;
int fadeHolder;

unsigned long currentMillis = 0;

int counter = 0;

int STAYON = 0;

void setup() {
  // initialize serial communications at 9600 bps:
  Serial.begin(9600);

  // set variables to current time

  currentMillis = millis();
}

void loop() {

  if(millis() - currentMillis > 250)
  {

    sensorValue = analogRead(analogInPin);

    Serial.println(sensorValue);

    if(sensorValue > 300)
    {
      counter++;
    }
  }
  // else{
  //   counter = 0;
  // }

  if(counter==10)

```

```

{
  STAYON = 1;
}

else{
  STAYON = 0;
}
  currentMillis = millis();

}

if(STAYON == 0)
{
fadeFunction();
}

else{
  //Serial.println("YAYAYAYAYA");
  delay(100000);
  counter = 0;
  STAYON = 0;

}

}

void fadeFunction(){

// START FADE

  if(fadeHolder < sensorValue){
    fadeHolder = sensorValue;
  }

  fadeHolder = fadeHolder - fuckFade;

  if (fadeHolder > 400) {
    // map it to the range of the analog out:
    outputValue = map(fadeHolder, 400, 1023, 0, 255);
    // change the analog out value:
    analogWrite(analogOutPin, outputValue);
  }
  else {
    analogWrite(analogOutPin, 0);
  }
}

```

```
/*  
  // print the results to the serial monitor:  
  Serial.print("sensor = " );  
  Serial.print(sensorValue);  
  Serial.print("\t output = ");  
  Serial.println(outputValue);  
  
  // wait 2 milliseconds before the next loop  
  // for the analog-to-digital converter to settle  
  // after the last reading:  
  */  
  delay(20);  
  
}
```