```
int sensorValue = 0;

void setup() {
  pinMode(A0, INPUT);
  pinMode(13, OUTPUT);
  Serial.begin(9600);
}

void loop() {
  sensorValue = analogRead(A0);
  Serial.print(sensorValue);
  int fade = map(sensorValue, 54, 974, 255, 0);
  Serial.print(fade);
  analogWrite(13, fade);

delay(100);
 }
```