

```
12 const int analogPin = A0; // Pin waar de spanningsdeler is aangesloten
13 const int ledPin = 13; // Pin waar de LED is aangesloten
14 const int threshold = 4
15
16 ; // Drempelwaarde voor 6-bits resolutie
17
18 // the setup routine runs once when you press reset:
19 void setup() {
20 // initialize serial communication at 9600 bits per second:
21 Serial.begin(9600);
22
23 // Zet de LED pin als output
24 pinMode(ledPin, OUTPUT);
25 }
26
27 // the loop routine runs over and over again forever:
28 void loop() {
29 // read the input on analog pin 0:
30 int sensorValue = analogRead(analogPin);
31
32 // print out the value you read:
33 Serial.println(sensorValue);
34
35 // Check if the sensor value is greater than the threshold
36 if (sensorValue > threshold) {
37 // Zet de LED aan
38 digitalWrite(ledPin, HIGH);
39 } else {
40 // Zet de LED uit
41 digitalWrite(ledPin, LOW);
42 }
43
44 delay(1); // delay in between reads for stability
45 }
```