#include <elapsedMillis.h>

const int temperaturePin = A0;

const int ledPin = 13;

elapsedMillis blinkInterval;

int blinkDuration = 250; // Blink interval for temperature below 30 degrees Celsius

int blinkDurationHighTemp = 500; // Blink interval for temperature above 30 degrees Celsius

int ledState = LOW;

void setup() {

pinMode(ledPin, OUTPUT);

Serial.begin(9600);

}

void loop() {

int temperature = readTemperature();

if (temperature < 30) {

blinkLED(blinkDuration);

} else {

blinkLED(blinkDurationHighTemp);

}

}

int readTemperature() {

int sensorValue = analogRead(temperaturePin);

float voltage = sensorValue \* (5.0 / 1023.0);

float temperatureC = (voltage - 0.5) \* 100.0;

return temperatureC;

}

void blinkLED(int interval) {

if (blinkInterval >= interval) {

blinkInterval = 0;

if (ledState == LOW) {

ledState = HIGH;

} else {

ledState = LOW;

}

digitalWrite(ledPin, ledState);

}

}