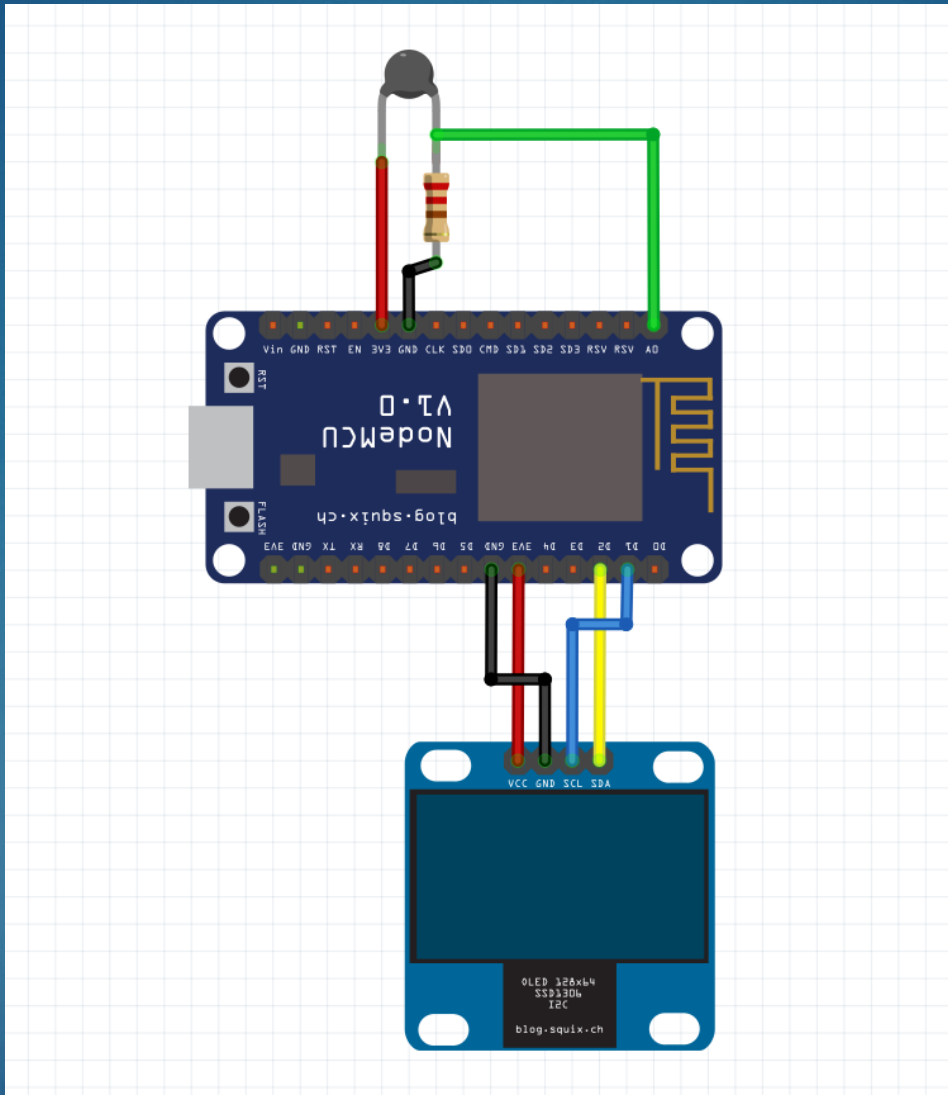
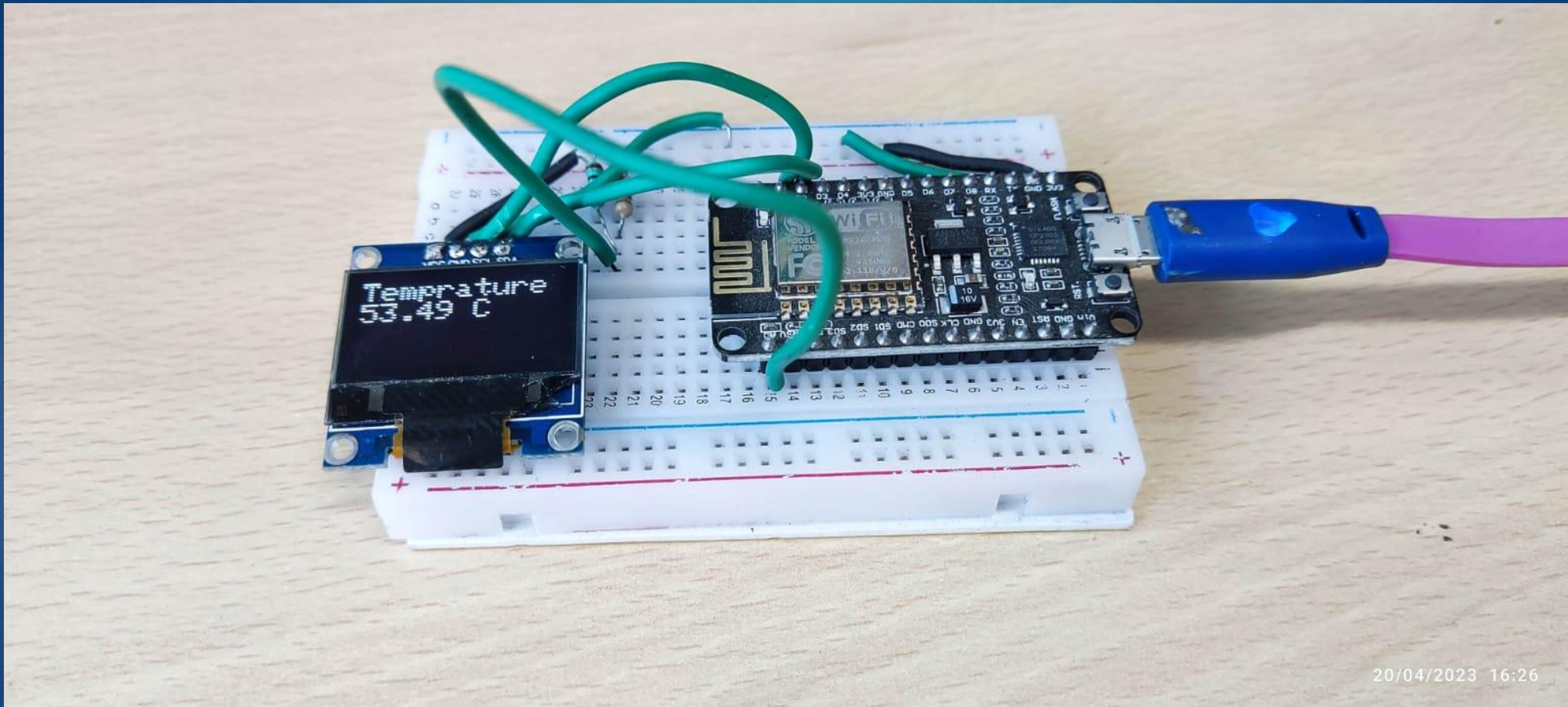




Temperature measurement using thermistor displaying on OLED

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```
#include <SPI.h>
#include <Wire.h>
#include <Adafruit_GFX.h>
#include <Adafruit_SSD1306.h>
#define SCREEN_WIDTH 128
#define SCREEN_HEIGHT 64
#define OLED_RESET -1 // Reset pin
#define SCREEN_ADDRESS 0x3C
Adafruit_SSD1306 display(SCREEN_WIDTH, SCREEN_HEIGHT, &Wire,
OLED_RESET);

int thermistorPin = A0;
int Vo;
float R1 = 200;
float logR2, R2, tKelvin, tCelsius, tFahrenheit;
float c1 = 1.009249522e-03, c2 = 2.378405444e-04, c3 = 2.019202697e-07;
void setup() {
  Serial.begin(9600);
  if(!display.begin(SSD1306_SWITCHCAPVCC, SCREEN_ADDRESS)) {
Serial.println(F("SSD1306 allocation failed"));
for(;;); }
display.clearDisplay();
display.setTextSize(2);
display.setTextColor(WHITE);
display.setCursor(0,0);
display.println("Temperature Reading");
display.display();
delay(2000);
}
```

```
void loop() {

    Vo = analogRead(thermistorPin);
    R2 = R1 * (1023.0 / (float)Vo - 1.0); // resistance of the Thermistor
    logR2 = log(R2);
    tKelvin = (1.0 / (c1 + c2 * logR2 + c3 * logR2 * logR2 * logR2));
    tCelsius = tKelvin - 273.15;
    tFahrenheit = (tCelsius * 9.0) / 5.0 + 32.0;

    Serial.print("Temperature: ");
    Serial.print(tFahrenheit);
    Serial.print(" F; ");
    Serial.print(tCelsius);
    Serial.println(" C");
    Serial.print(Vo);

    display.clearDisplay();
    display.setTextSize(2);
    display.setTextColor(WHITE);
    display.setCursor(0,0);
    display.println("Temprature");
    display.print(tCelsius);
    display.print(" C");
    display.display();
    delay(500);
}
```