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//DHT22 Sensor Testing Code

#include "DHT.h" // Importing DHT sensor library
#define DHTPIN 2 // Digital pin 2 connected to the DHT sensor
#define DHTTYPE DHT22 // Defining the type of sensor for the library

DHT dht(DHTPIN, DHTTYPE);

void setup() {
  Serial.begin(9600);
  Serial.println(F("Testing DHT22")); //PrintF means the statis string is stored in program memory, not ram.
  dht.begin();
}

void loop() {

  delay(2000); // Wait 2 seconds before each read as the sensor update roughly every 2 seconds

  // Reading temperature/humidity can take up to 250 milliseconds, so the total is up to 2.25 seconds
  float humidity = dht.readHumidity(); // Reading the humitidy as a % and storing in variable humidity
  float temperature = dht.readTemperature(); // Reading the temperature as Celcius and storing in variable

  // Checking if any reads failed, exits early to loop again when failed
  if (isnan(humidity) || isnan(temperature) ) {
    Serial.println(F("Failed to read from DHT sensor"));
    return;
  }

  float heatIndex = dht.computeHeatIndex(temperature, humidity, false); // Computing heat index in Celsius (isFahreheit = false)

  Serial.println(F("*****"));

  Serial.print(F("Temperature: ")); //Printing temperature
  Serial.print(temperature);
  Serial.println(F("°C"));

  Serial.print(F("Humidity: ")); //Printing humidity
  Serial.print(humidity);
  Serial.println(F("%"));

  Serial.print(F("Heat index: ")); //Printing heat index
  Serial.print(heatIndex);
  Serial.println(F("°C "));
  Serial.println(F("*****"));
  Serial.println();
}
```

sketch_mar12a

```
#include <Adafruit_Sensor.h>
#include <DHT.h>
#include <DHT_U.h>
/*
 * include the necessary library
 * Adafruit's library are all used under MIT license, which permits the use for commercial purpose.
 */

int DHTPIN1 = 11;
int DHTPIN2 = 12;
DHT dht1(DHTPIN1, DHT22);
DHT dht2(DHTPIN2, DHT22);
/*
 * Initialize the DHT sensor, two sensor used in total
 * Designated pin are pin 11 & 12
 */

void setup() {
  // put your setup code here, to run once:
  Serial.begin(9600);
  Serial.print(F("Setup complete!"));
  Serial.println();
  pinMode(DHTPIN1, INPUT);
  pinMode(6, INPUT);
  dht1.begin();
  dht2.begin();
}

void loop() {
  // put your main code here, to run repeatedly:
  delay(1000);
  float DHT22_1_t = dht1.readTemperature();
  float DHT22_1_h = dht1.readHumidity();
  Serial.print("DHT22_1 ");
  Serial.print(DHT22_1_t); Serial.print("Degree Celsius ");
  Serial.print(DHT22_1_h); Serial.print("%RH");
  Serial.println();
  delay(1000);
  float DHT22_2_t = dht2.readTemperature();
  float DHT22_2_h = dht2.readHumidity();
  Serial.print("DHT22_2 ");
  Serial.print(DHT22_2_t); Serial.print("Degree Celsius ");
  Serial.print(DHT22_2_h); Serial.print("%RH");
  Serial.println();
  //Next step is to be able to package those function separately so ideally in the loop bracket are only serial print.
}
```