// Example testing sketch for various DHT humidity/temperature sensors

// Written by ladyada, public domain

#include "DHT.h"

#define DHTPIN 2 // what pin we're connected to

#define PHOTOSENSE\_ANA\_PIN A0

#define SOUNDSENSE\_ANA\_PIN A1

#define DHTTYPE DHT11 // DHT 11

const int sendFreq = 1000; //

unsigned int sample;

DHT dht(DHTPIN, DHTTYPE);

void setup() {

Serial.begin(9600);

dht.begin();

}

void loop() {

// Reading temperature or humidity takes about 250 milliseconds!

// Sensor readings may also be up to 2 seconds 'old' (its a very slow sensor)

unsigned long startMillis= millis(); // Start of sample window

float h = dht.readHumidity();

float t = dht.readTemperature();

int l = analogRead(PHOTOSENSE\_ANA\_PIN);

unsigned int peakToPeak = 0; // peak-to-peak level

unsigned int signalMax = 0;

unsigned int signalMin = 1024;

// collect data for sendFreq - elapsedTime mS

while (millis() - startMillis < sendFreq)

{

sample = analogRead(SOUNDSENSE\_ANA\_PIN);

//Serial.println(sample);

if (sample < 1024) // toss out spurious readings

{

if (sample > signalMax)

{

signalMax = sample; // save just the max levels

}

else if (sample < signalMin)

{

signalMin = sample; // save just the min levels

}

}

}

peakToPeak = signalMax - signalMin; // max - min = peak-peak amplitude

double s = (peakToPeak \* 3.3) / 1024; // convert to volts

Serial.print(l);

Serial.print("\t");

Serial.print(h);

Serial.print("\t");

Serial.print(t);

Serial.print("\t");

Serial.println(s);

}