/\*

\* Micrombedded

Connect the piezo sensor on connector CN11 for this experiment;

\*/

// these constants won't change:

const int buzzer = A1; // LED connected to digital pin 13

const int knockSensor = A1; // the piezo is connected to analog pin 0

const int threshold = 400; // threshold value to decide when the detected sound is a knock or not

// these variables will change:

int sensorReading = 0; // variable to store the value read from the sensor pin

void setup() {

pinMode(buzzer,INPUT);

}

void loop() {

// read the sensor and store it in the variable sensorReading:

pinMode(buzzer,INPUT);

sensorReading = analogRead(knockSensor);

// if the sensor reading is greater than the threshold:

if (sensorReading >= threshold) {

pinMode(buzzer,OUTPUT);

tone(buzzer,261);

// Waits some time to turn off

delay(200);

//Turns the buzzer off

noTone(buzzer);

// Sounds the buzzer at the frequency relative to the note D in Hz

tone(buzzer,293);

delay(200);

noTone(buzzer);

// Sounds the buzzer at the frequency relative to the note E in Hz

tone(buzzer,329);

delay(200);

noTone(buzzer);

// Sounds the buzzer at the frequency relative to the note F in Hz

tone(buzzer,349);

delay(200);

noTone(buzzer);

// Sounds the buzzer at the frequency relative to the note G in Hz

tone(buzzer,392);

delay(200);

noTone(buzzer);

}

delay(100); // delay to avoid overloading the serial port buffer

}

void setup() {

// put your setup code here, to run once:

pinMode(4,OUTPUT);

pinMode(9,INPUT);

digitalWrite(4,HIGH);

}

void loop() {

if(digitalRead(9)== 1)

digitalWrite(4,HIGH);

else

digitalWrite(4,LOW);

}

#include <SimpleDHT.h>

int pinDHT11 = A1;

SimpleDHT11 dht11(pinDHT11);

void setup()

{

Serial.begin(115200);

}

void loop() {

// start working...

Serial.println("=================================");

Serial.println("Sample DHT11...");

// read without samples.

byte temperature = 0;

byte humidity = 0;

int err = SimpleDHTErrSuccess;

if ((err = dht11.read(&temperature, &humidity, NULL)) != SimpleDHTErrSuccess)

{

Serial.print("Read DHT11 failed, err=");

Serial.print(SimpleDHTErrCode(err));

Serial.print(",");

Serial.println(SimpleDHTErrDuration(err));

delay(1000);

return;

}

Serial.print("Sample OK: ");

Serial.print((int)temperature); Serial.print(" \*C, ");

Serial.print((int)humidity); Serial.println(" H");

// DHT11 sampling rate is 1HZ.

delay(1500);

}

