**Mini Project : Advance Embedded System(AES)**

Name: Monika Desai

Roll no : 31

Class- Msc-cs (SEM-02)

Topic :

Q.Using Arduino UNO, display temperature & humidity on LCD display which is being sensed by DHT11

Code:

//Libraries

#include <DHT.h>;

#include <LiquidCrystal\_I2C.h>

#include <Wire.h>

LiquidCrystal\_I2C lcd(0x27,16,2);

//Constants

#define DHTPIN 7 // what pin we're connected to

#define DHTTYPE DHT22 // DHT 22

DHT dht(DHTPIN, DHTTYPE); //// Initialize DHT sensor for normal 16mhz Arduino

//Variables

int h; //Stores humidity value

int t; //Stores temperature value

void setup() {

**Serial**.begin(9600);

**Serial**.println("Temperature and Humidity Sensor Test");

dht.begin();

lcd.init(); //initialize the lcd

lcd.backlight(); //open the backlight

}

void loop() {

//Read data and store it to variables h (humidity) and t (temperature)

// Reading temperature or humidity takes about 250 milliseconds!

h = dht.readHumidity();

t = dht.readTemperature();

//Print temp and humidity values to serial monitor

**Serial**.print("Humidity: ");

**Serial**.print(h);

**Serial**.print(" %, Temp: ");

**Serial**.print(t);

**Serial**.println(" ° Celsius");

// set the cursor to (0,0):

// print from 0 to 9:

lcd.setCursor(0, 0);

lcd.println("Temp & Humidity");

lcd.setCursor(0, 1);

lcd.print("T:");

lcd.print(t);

lcd.print("C");

lcd.setCursor(6, 1);

lcd.setCursor(9, 1);

lcd.print("H:");

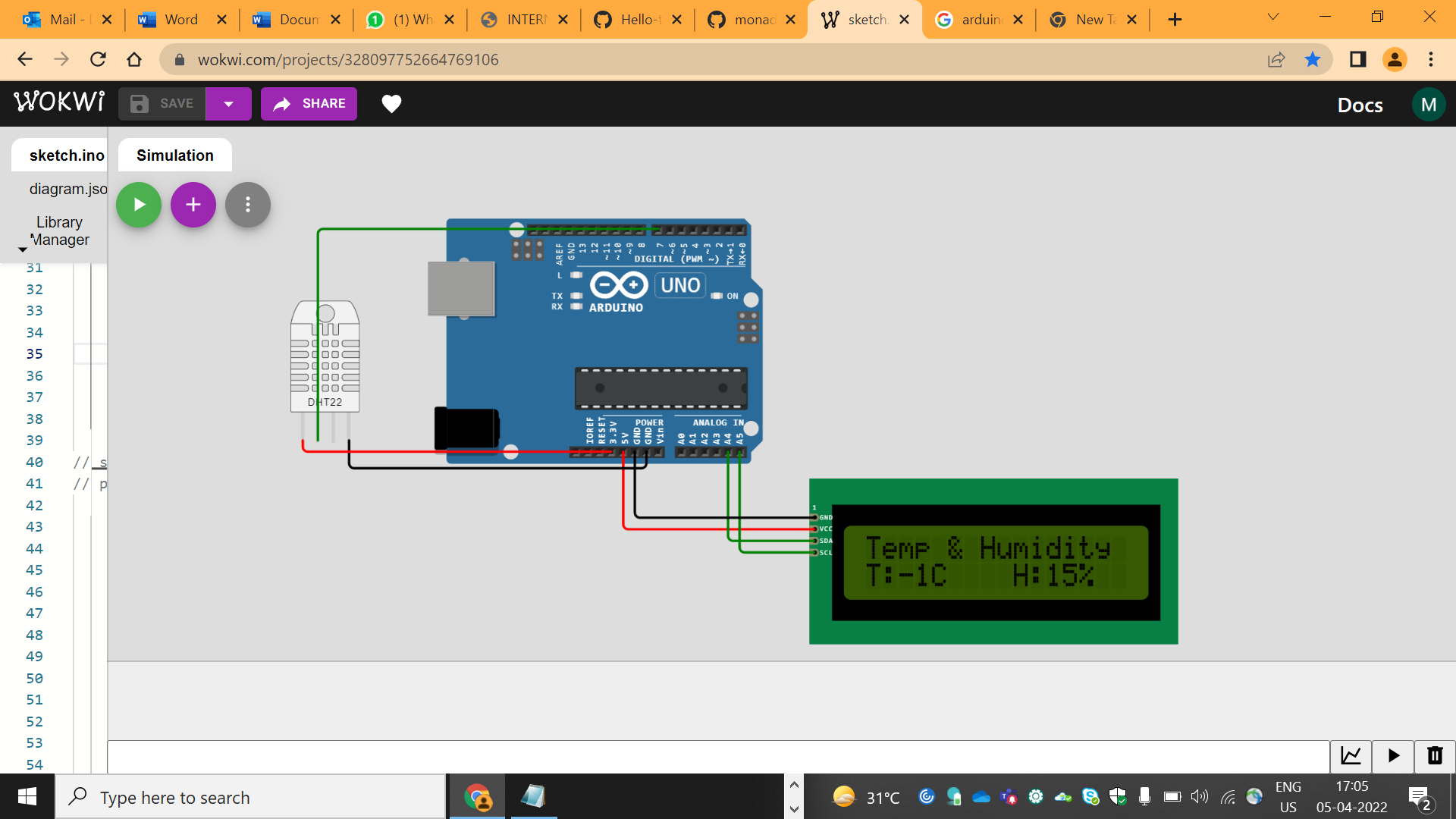
lcd.print(h);

lcd.print("%");

delay(1000); //Delay 1 sec.

}

Connection:



Output:

