# Description:

Write a program to show Temperature and Humidity on LCD with Floating Point.

# Source Code:

//include the DHT11 library code

#include <SimpleDHT.h>

//include the LCD library code

#include <LiquidCrystal.h>

// initialize the library with the numbers of the interface pins

LiquidCrystal lcd(11,12,14,15,16,17);

// declaring DHT11 interface pins and input variable

int dhtval = 6;

SimpleDHT11 dht11(dhtval);

void setup()

{

// set up the LCD's number of columns and rows:

lcd.begin(16, 2);

Serial.begin(9600);

}

void loop()

{

lcd.clear();

byte temperature = 0;

byte humidity = 0;

int err = SimpleDHTErrSuccess; //initialize error variable

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

{

lcd.print("Read DHT11 failed, err="); //display error code if error occurs

lcd.println(err);

delay(1000);

return;

}

lcd.setCursor(0, 0); //set the cursor to col 0 and row 0 of LCD

lcd.print((float)temperature); //prints DHT11 temperature value to LCD

lcd.print(" \*C, "); //prints DHT11 temperature value to LCD

lcd.setCursor(0, 1); //set the cursor to col 0 and row 1 of LCD

lcd.print((float)humidity); //prints DHT11 humidity value to LCD

lcd.println(" H"); //prints DHT11 humidity value to LCD

// DHT11 sampling rate is 1HZ.

delay(1500);

}

# Libraries:

*LiquidCrystal.h:*

It is a library which allows Arduino to control LCDs.

*SimpleDHT.h:*

It is a library for handling Standard DHT sensors (DHT11 and DHT22).

# Functions:

*lcd.print((float)temperature):*

Print temperature value in float.

*lcd.print((float)humidity):*

Print humidity value in float.