# Description:

A simple program to get Temperature and Humidity readings from DHT11 sensor and display them on the Iomatic IoT Development kit.

# Source Code:

// include the library code:

#include <LiquidCrystal.h>

#include <SimpleDHT.h>

//DTH11 connected on pin D6 in IomaTic

int pinDHT11 = 6;

SimpleDHT11 dht11;

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

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

void setup()

{

//Initialize the LCD in 16x2 mode

lcd.begin(16, 2);

delay(1000);

//Set cursor at first character/coloumn of first line/row

lcd.setCursor(0,0);

//Print the message as metioned cursor location

lcd.print(" IomaTic ");

//Initialize a serial communication with baud rate 9600

Serial.begin(9600);

delay(1000);

}

void loop()

{

byte temperature = 0;

byte humidity = 0;

int err = SimpleDHTErrSuccess;

if ((err = dht11.read(pinDHT11, &temperature, &humidity, NULL)) != SimpleDHTErrSuccess)

{

//Serial.print("Read DHT11 failed, err="); Serial.println(err);delay(1000);

return;

}

//Set cursor at first character/coloumn of first line/row

lcd.setCursor(0,1);

//Print the message as metioned cursor location

lcd.print("Val:");

lcd.print((int)temperature);

lcd.print(" \*C, ");

lcd.print((int)humidity);

lcd.print(" H");

delay(500);

}

# Libraries:

SimpleDHT.h: Library for handling standard DHT sensors(DHT22 and DHT11).

# Functions:

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

Print temperature value in int.

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

Print humidity value in int.