

```

// DHT-11 sensor with Arduino
// Temperature and humidity sensor and
// I2C LCD1602
// SDA --> A4
// SCL --> A5

//Libraries
#include <DHT.h>;
//I2C LCD:
#include <LiquidCrystal_I2C.h>
#include <Wire.h>

LiquidCrystal_I2C lcd(0x27,16,2); // set the LCD address to 0x27 for a 16 chars and 2 line display

//Constants
#define DHTPIN 7 // what pin we're connected to
#define DHTTYPE DHT11 // DHT 11
DHT dht(DHTPIN, DHTTYPE); //// Initialize DHT sensor for normal 16mhz Arduino

//Variables
//int chk;
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:
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```
    lcd.setCursor(0, 0);
```

```
    lcd.println(" Now Temperature ");
```

```
    lcd.setCursor(0, 1);
```

```
    lcd.print("T:");
```

```
    lcd.print(t);
```

```
    lcd.print("C");
```

```
    lcd.setCursor(6, 1);
```

```
    lcd.println("2020 ");
```

```
    lcd.setCursor(11, 1);
```

```
lcd.print("H:");  
lcd.print(h);  
lcd.print("%");  
  
delay(1000); //Delay 1 sec.  
}
```