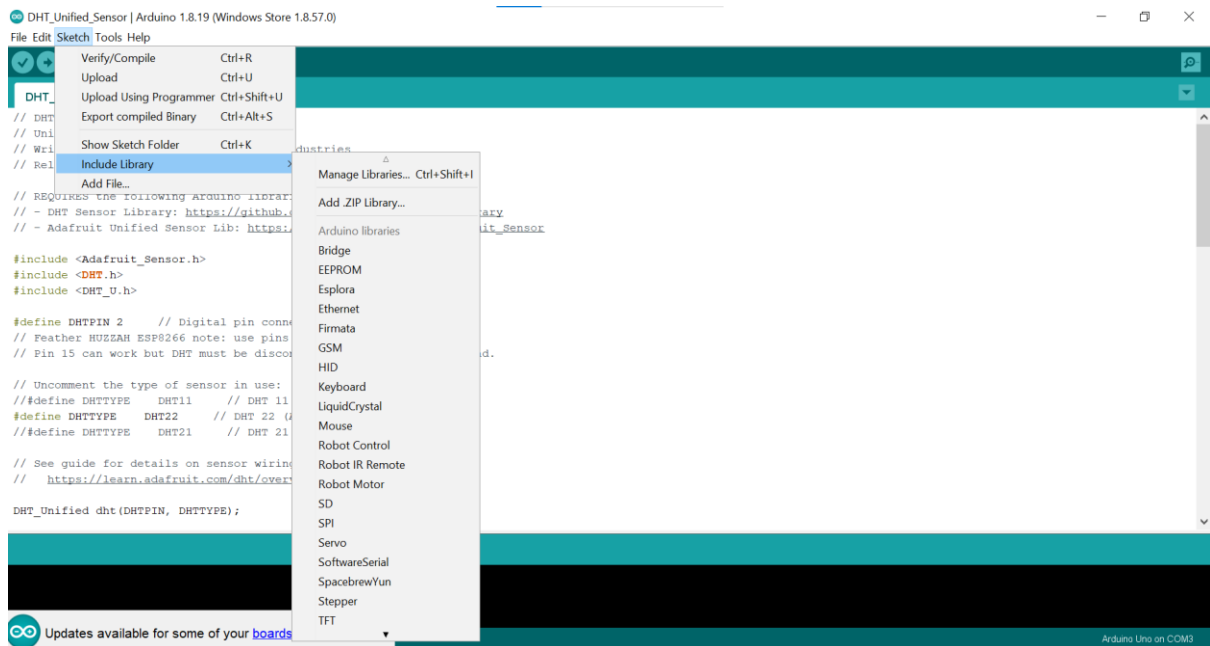
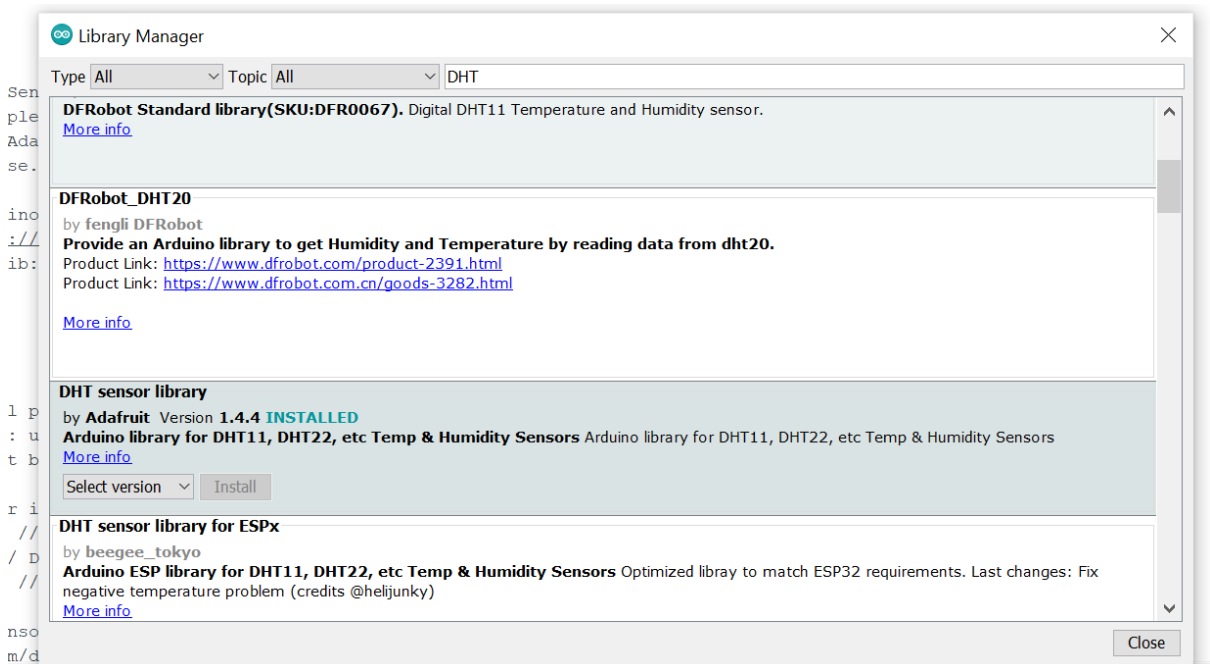


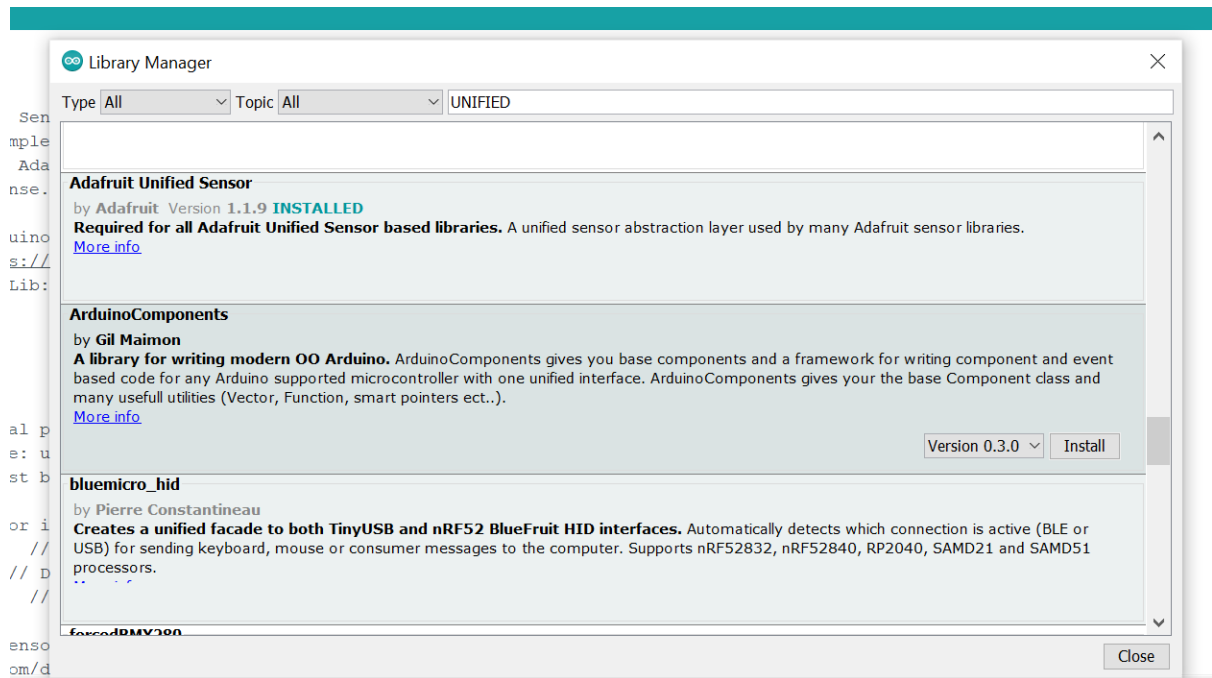
Temperature, humidity sensing with Arduino and node red dashboard



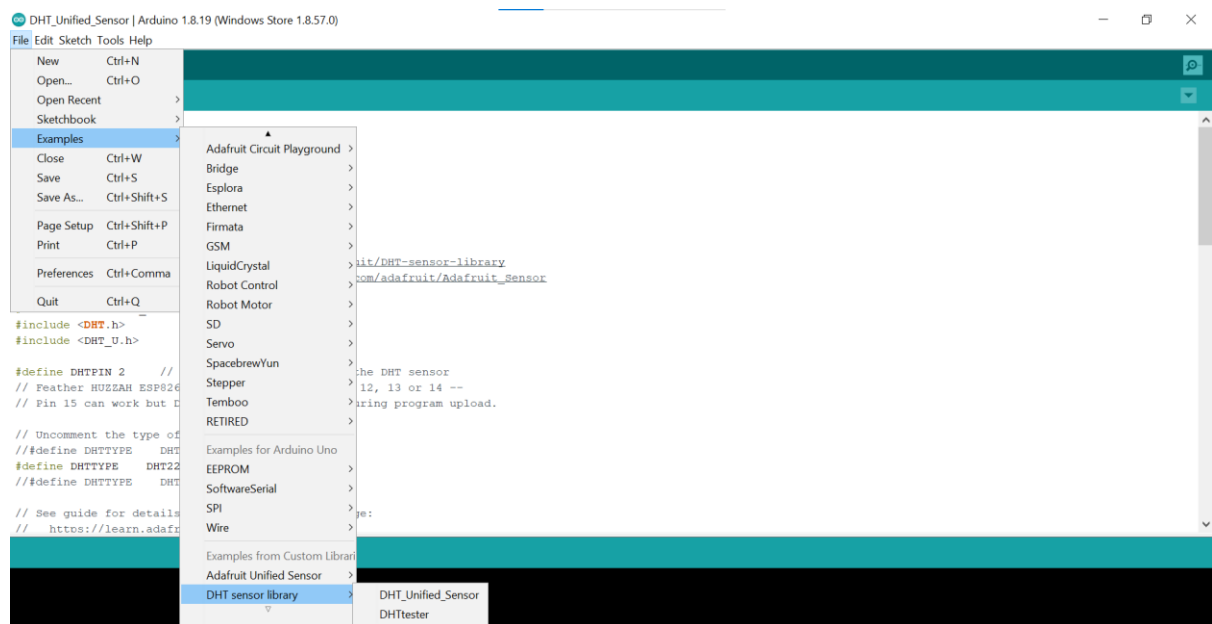
Click manage libraries



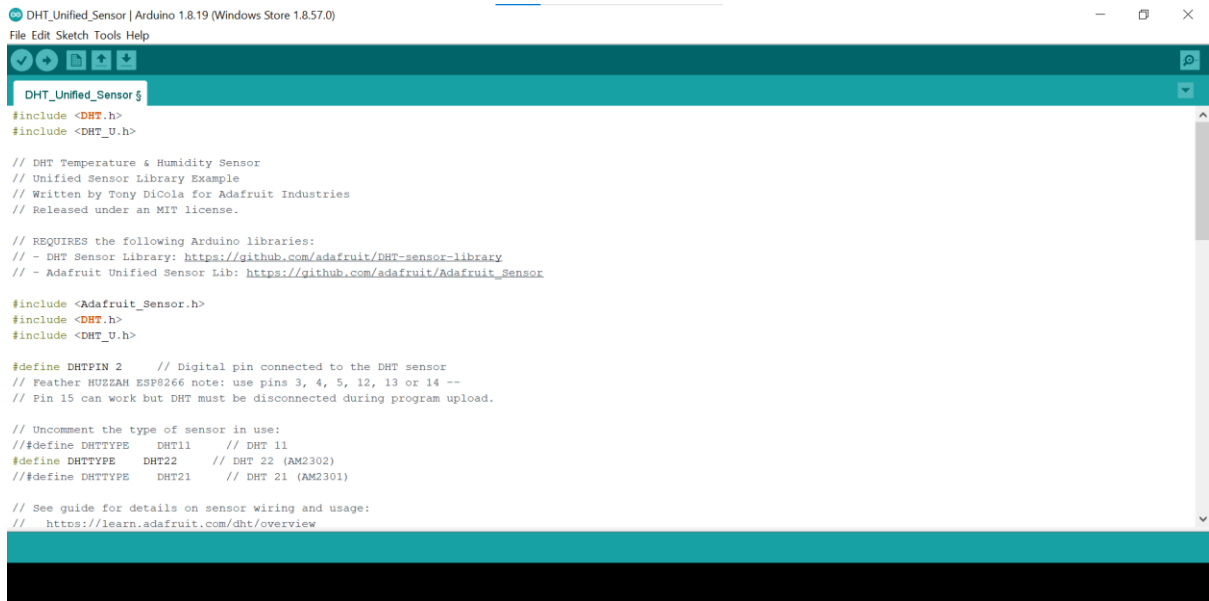
INSTALL DHT SENSOR LIBRARY



Make sure adafruit unified sensor is installed



Choose DHT unified sensor



```
DHT_Unified_Sensor | Arduino 1.8.19 (Windows Store 1.8.57.0)
File Edit Sketch Tools Help

DHT_Unified_Sensor $
#include <DHT.h>
#include <DHT_U.h>

// DHT Temperature & Humidity Sensor
// Unified Sensor Library Example
// Written by Tony DiCola for Adafruit Industries
// Released under an MIT license.

// REQUIRES the following Arduino libraries:
// - DHT Sensor Library: https://github.com/adafruit/DHT-sensor-library
// - Adafruit Unified Sensor Lib: https://github.com/adafruit/Adafruit\_Sensor

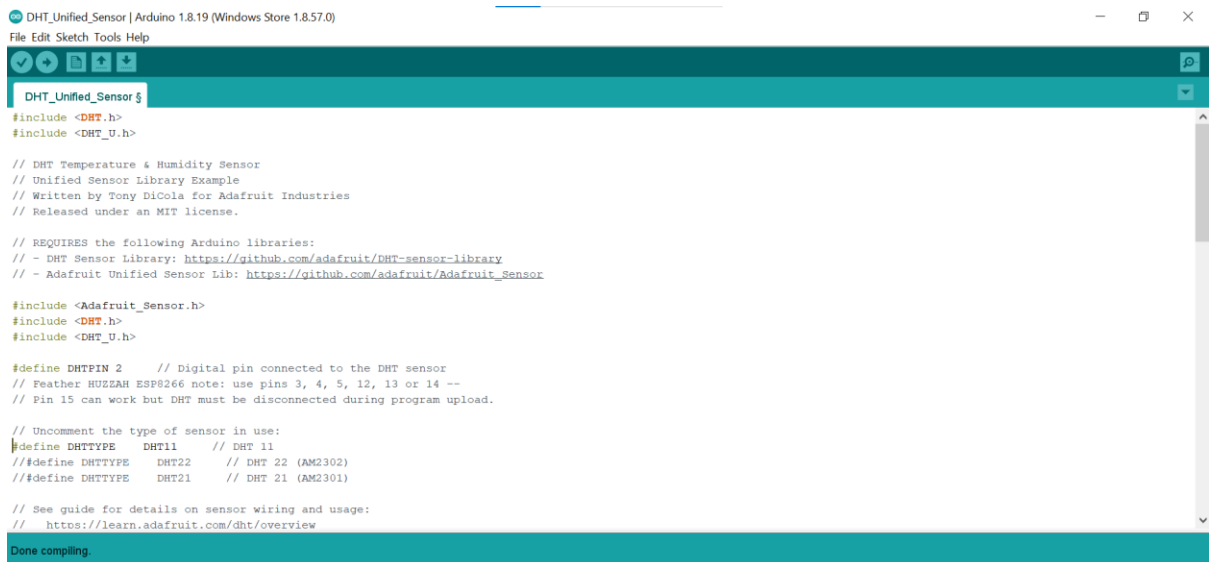
#include <Adafruit_Sensor.h>
#include <DHT.h>
#include <DHT_U.h>

#define DHTPIN 2 // Digital pin connected to the DHT sensor
// Feather HUZZAH ESP8266 note: use pins 3, 4, 5, 12, 13 or 14 --
// Pin 15 can work but DHT must be disconnected during program upload.

// Uncomment the type of sensor in use:
// #define DHTTYPE DHT11 // DHT 11
#define DHTTYPE DHT22 // DHT 22 (AM2302)
// #define DHTTYPE DHT21 // DHT 21 (AM2301)

// See guide for details on sensor wiring and usage:
// https://learn.adafruit.com/dht/overview
```

I am using DHT11 so



```
DHT_Unified_Sensor | Arduino 1.8.19 (Windows Store 1.8.57.0)
File Edit Sketch Tools Help

DHT_Unified_Sensor $
#include <DHT.h>
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// DHT Temperature & Humidity Sensor
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#include <Adafruit_Sensor.h>
#include <DHT.h>
#include <DHT_U.h>

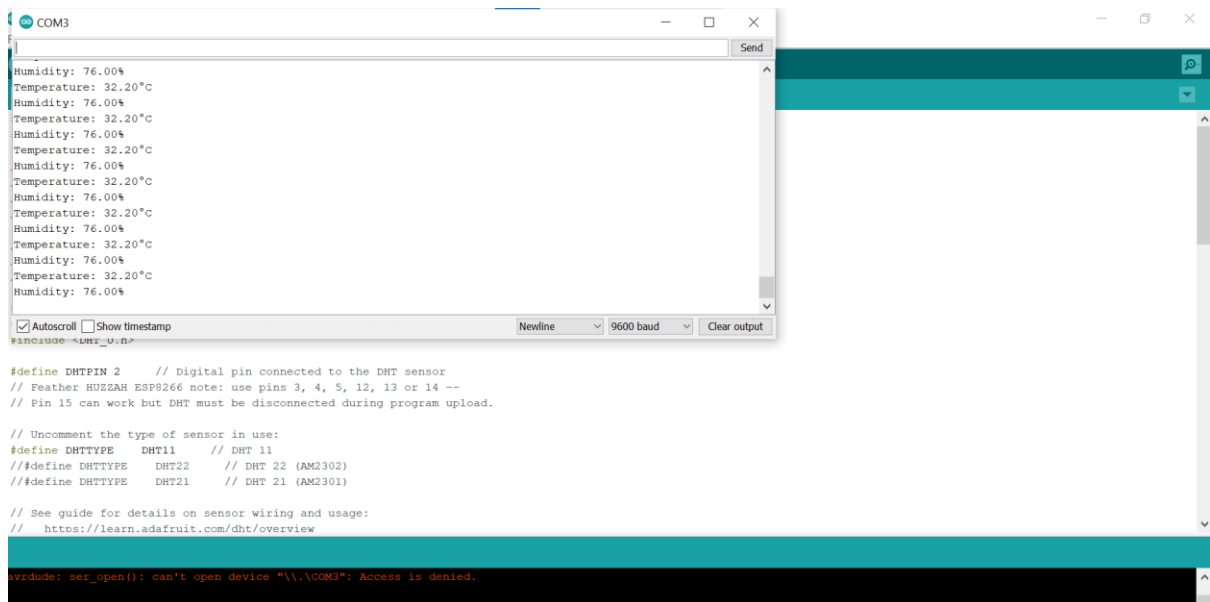
#define DHTPIN 2 // Digital pin connected to the DHT sensor
// Feather HUZZAH ESP8266 note: use pins 3, 4, 5, 12, 13 or 14 --
// Pin 15 can work but DHT must be disconnected during program upload.

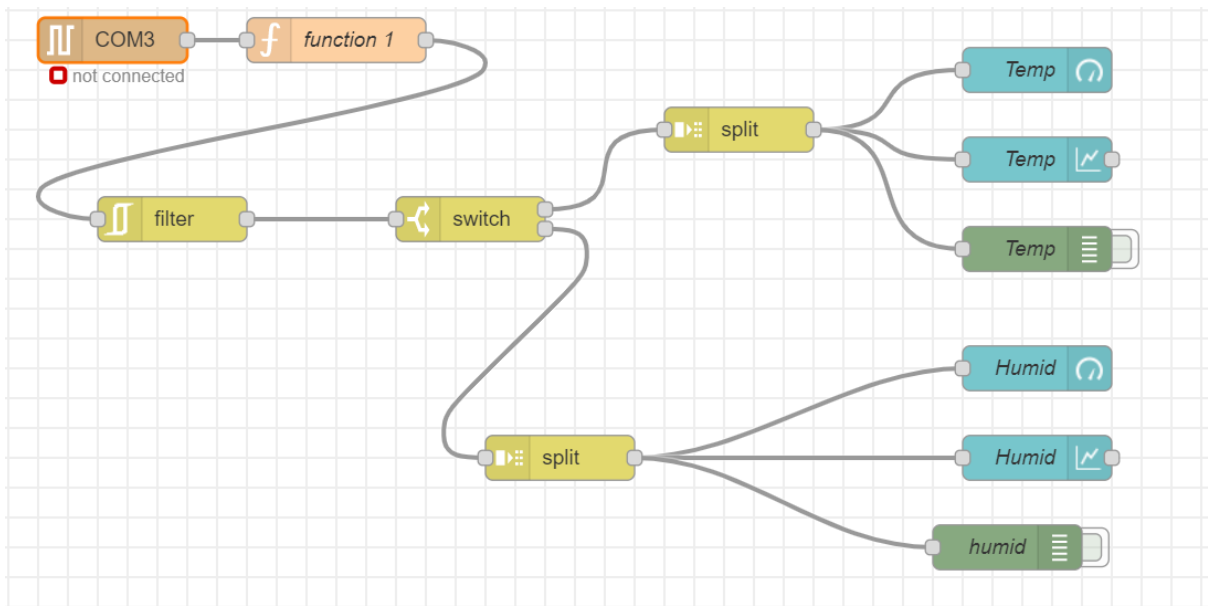
// Uncomment the type of sensor in use:
// #define DHTTYPE DHT11 // DHT 11
#define DHTTYPE DHT22 // DHT 22 (AM2302)
// #define DHTTYPE DHT21 // DHT 21 (AM2301)

// See guide for details on sensor wiring and usage:
// https://learn.adafruit.com/dht/overview

Done compiling.
```

Click serial monitor





Edit serial in node

Delete Cancel Done

⚙️ Properties

Serial Port COM3:9600-8N1

Name Name

Enabled

✕

Edit function node

Delete

Cancel

Done

⚙️ Properties

⚙️

📄

🖨️

📁 Name

function 1

📄 ▼

⚙️ Setup

On Start

On Message

On Stop

1 var newMsg = {payload:msg.payload.toString()};

2 return msg;

☐ Enabled

```
var newMsg = {payload:msg.payload.toString()};  
return msg;
```

Edit switch node

Delete

Cancel

Done

⚙ Properties



🔑 Name

Name

⋮ Property

▼ msg. payload



>= ▼

▼ previous value

→ 1



>= ▼

▼ a_z 0

→ 2



+ add

checking all rules



☐ recreate message sequences

☐ Enabled

Edit split node

Delete

Cancel

Done

⚙ Properties



Split `msg.payload` based on type:

String / Buffer

Split using ▼ a_z :

☐ Handle as a stream of messages

Array

Split using Fixed length of 1

Object

Send a message for each key/value pair

☐ Copy key to msg.

☐ Enabled

Edit split node

Delete

Cancel

Done

⚙ Properties



Split `msg.payload` based on type:

String / Buffer

Split using ▼ a_z :

☐ Handle as a stream of messages

Array

Split using Fixed length of 1

Object

Send a message for each key/value pair

☐ Copy key to msg.

☐ Enabled

Edit gauge node

Delete

Cancel

Done

⚙ Properties



📊 Group

[tempensor] tempensor



📏 Size

auto

☰ Type

Donut



🏷 Label

gauge

🏷 Value format

{{value}}

🏷 Units

units

Range

min

0

max

100

Colour gradient



☐ Enabled

Edit chart node

Delete

Cancel

Done

⚙ Properties



📊 Group

[tempensor] tempensor



📐 Size

auto

🏷 Label

chart

📈 Type

📈 Line chart



☐ enlarge points

X-axis

last

10

second



OR

1000

points

X-axis Label

▼ HH:mm:ss

☐ as UTC

Y-axis

min

max

Legend

None



Interpolate

linear



☐ Enabled

Edit gauge node

Delete

Cancel

Done

Properties



Group

[tempensor] tempensor



Size

auto

Type

Donut



Label

gauge

Value format

{{value}}

Units

units

Range

min 0

max 100

Colour gradient



☐ Enabled

Edit chart node

Delete

Cancel

Done

⚙️ Properties

⚙️

📄

🖨️

📊 Group

[tempensor] tempensor

▼

✎️

📏 Size

auto

🏷️ Label

chart

📈 Type

📈 Line chart

▼

☐ enlarge points

X-axis

last

10

second

▼

OR

1000

points

X-axis Label

▼ HH:mm:ss

☐ as UTC

Y-axis

min

max

Legend

None

▼

Interpolate

linear

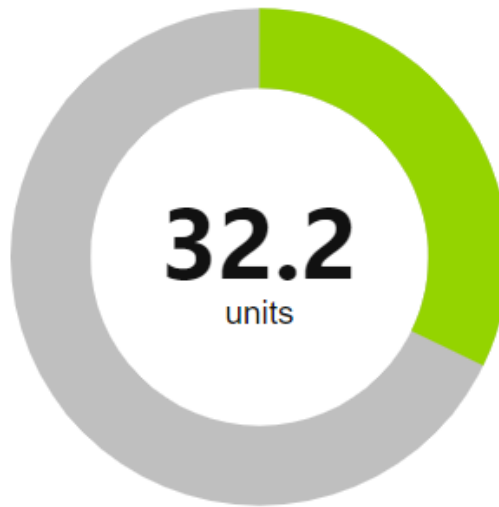
▼

☐ Enabled

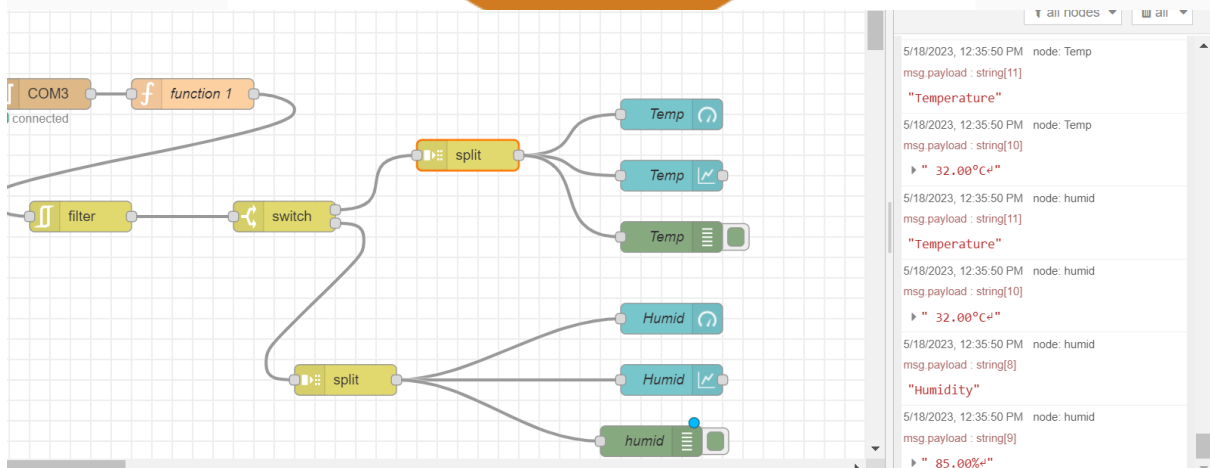
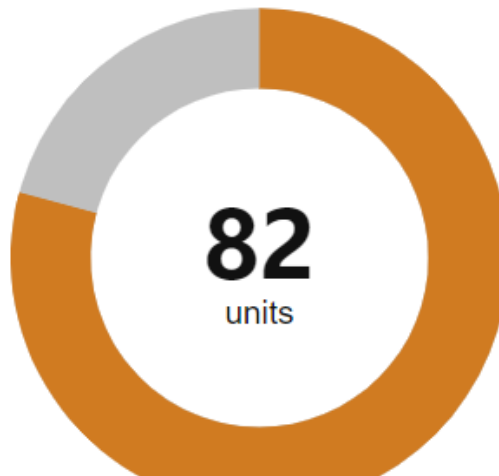
Close the com output in arduino

Deploy and ui

gauge



gauge



chart



chart

