

# Node-RED: Case Study 3

## Temperature & Humidity Monitoring System using ESP32 & DHT11 + MariaDB

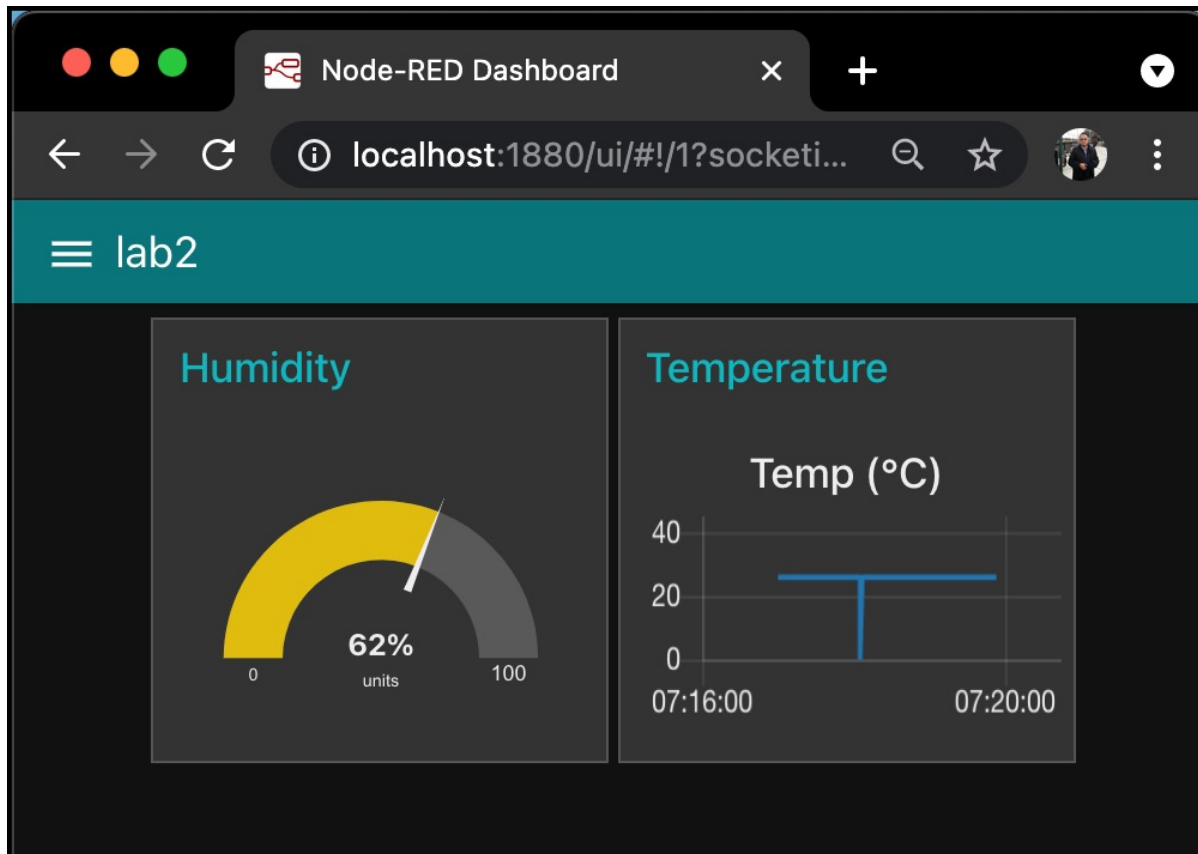


v1 mar2021

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**Scenario:** > Continuation of BDA Case Study 2: Temperature & Humidity Monitoring System using ESP32 & DHT11  
> Save the data into MariaDB

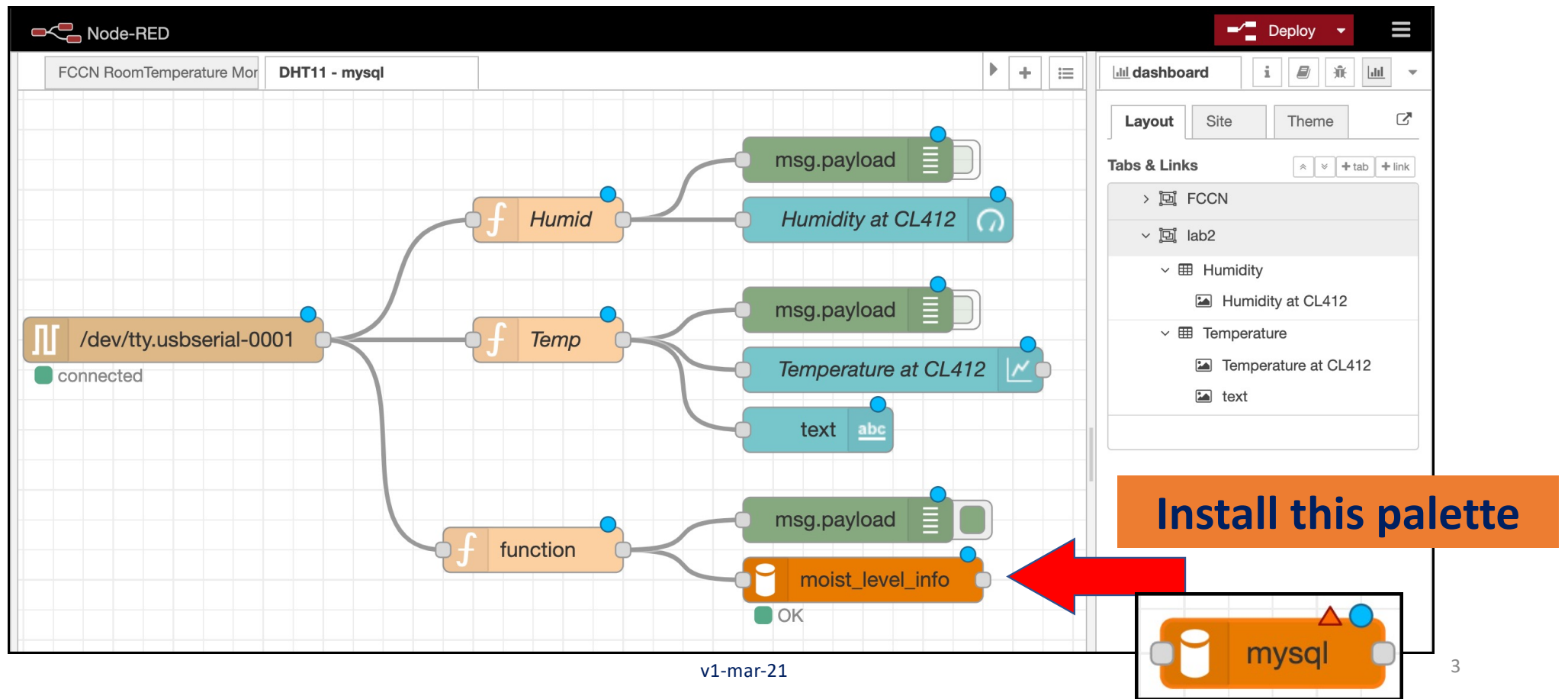


What are the information that you can EXTRACT from this figure?

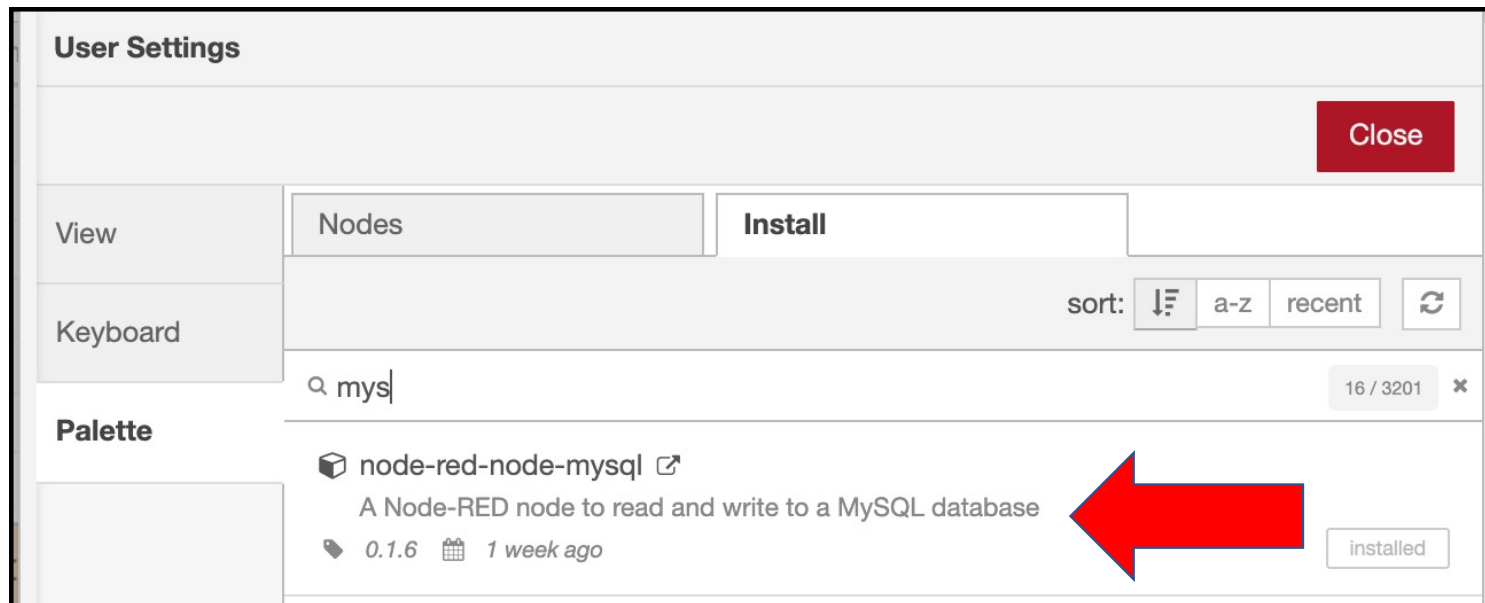
## BDA CASE STUDY 3: Temperature & Humidity Monitoring System using ESP32 & DHT11 + MariaDB

### Your Workspace

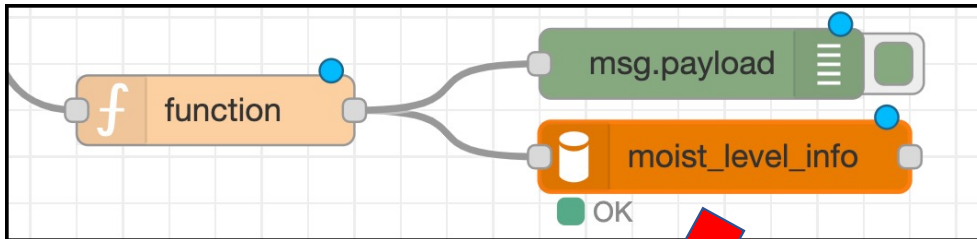
[e1-cs3-31mar21-flows-e32-dht11-dbase.json](#)



## Install MySQL Palette



## Configure MySQL information



**Edit mysql node**

Delete Cancel Done

**Properties**

Database moist\_level\_info ✓

Name Name

**Edit mysql node > Edit MySQLdatabase node**

Delete Cancel Update

**Properties**

Host 127.0.0.1

Port 3306

User root

Password

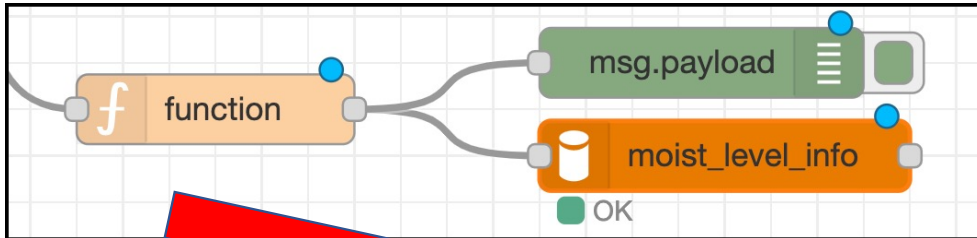
Database moist\_level\_info

Timezone

Charset UTF8

Name Name

## Configure Function Script



```
var output = msg.payload.split(",");  
  
var humid = parseInt(output[0]);  
var temp = parseInt(output[1]);  
msg.topic="INSERT INTO plot_1 (humidV, tempV) VALUES (?,?)"  
msg.payload = [output[0], output[1]];  
  
return msg;
```

Edit function node

Delete Cancel Done

Properties

Name Name

Setup Function Close

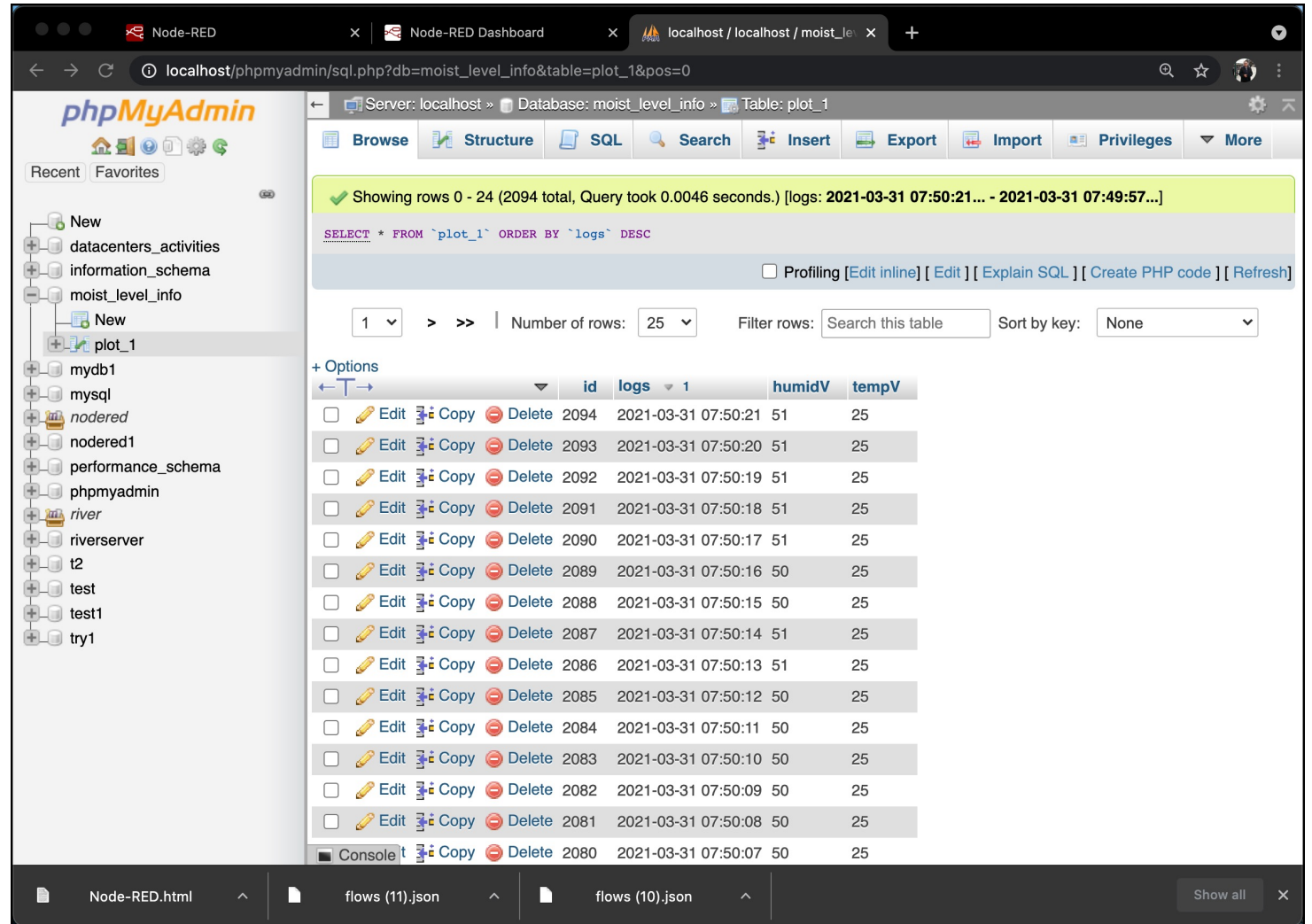
```
1 var output = msg.payload.split(",");  
2  
3 var humid = parseInt(output[0]);  
4 var temp = parseInt(output[1]);  
5 msg.topic="INSERT INTO plot_1 (humidV, tempV) VALUES (?,?)"  
6 msg.payload = [output[0], output[1]];  
7  
8 return msg;
```

Outputs 1

Enabled

## BDA CASE STUDY 3: Temperature & Humidity Monitoring System using ESP32 & DHT11 + MariaDB

### Data saved in the server



The screenshot displays the phpMyAdmin interface for a database named 'moist\_level\_info'. The 'plot\_1' table is selected, showing 2094 rows. The table structure includes columns: id, logs, humidV, and tempV. The data is sorted by 'logs' in descending order. The interface also shows a sidebar with a list of databases and tables, and a bottom console area.

Showing rows 0 - 24 (2094 total, Query took 0.0046 seconds.) [logs: 2021-03-31 07:50:21... - 2021-03-31 07:49:57...]

```
SELECT * FROM `plot_1` ORDER BY `logs` DESC
```

Profiling [Edit inline] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

1 > >> | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

				id	logs	humidV	tempV
<input type="checkbox"/>	Edit	Copy	Delete	2094	2021-03-31 07:50:21	51	25
<input type="checkbox"/>	Edit	Copy	Delete	2093	2021-03-31 07:50:20	51	25
<input type="checkbox"/>	Edit	Copy	Delete	2092	2021-03-31 07:50:19	51	25
<input type="checkbox"/>	Edit	Copy	Delete	2091	2021-03-31 07:50:18	51	25
<input type="checkbox"/>	Edit	Copy	Delete	2090	2021-03-31 07:50:17	51	25
<input type="checkbox"/>	Edit	Copy	Delete	2089	2021-03-31 07:50:16	50	25
<input type="checkbox"/>	Edit	Copy	Delete	2088	2021-03-31 07:50:15	50	25
<input type="checkbox"/>	Edit	Copy	Delete	2087	2021-03-31 07:50:14	51	25
<input type="checkbox"/>	Edit	Copy	Delete	2086	2021-03-31 07:50:13	51	25
<input type="checkbox"/>	Edit	Copy	Delete	2085	2021-03-31 07:50:12	50	25
<input type="checkbox"/>	Edit	Copy	Delete	2084	2021-03-31 07:50:11	50	25
<input type="checkbox"/>	Edit	Copy	Delete	2083	2021-03-31 07:50:10	50	25
<input type="checkbox"/>	Edit	Copy	Delete	2082	2021-03-31 07:50:09	50	25
<input type="checkbox"/>	Edit	Copy	Delete	2081	2021-03-31 07:50:08	50	25
<input type="checkbox"/>	Edit	Copy	Delete	2080	2021-03-31 07:50:07	50	25

v1-mar-21

## QUESTIONS?



Questions?



QnA

**END**