Send & Read Data within MySQL & Node-RED
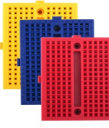
Node-RED

XAMPP

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Sept2023

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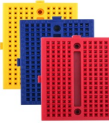
Task:

√ To send slider's value, Node-RED's system time and random value into MySQL.

√ To read slider's value & random value from MySQL & display at Node-RED.

A. MySQL:
√ Database Name: **2023_nodered_mysqli_1**
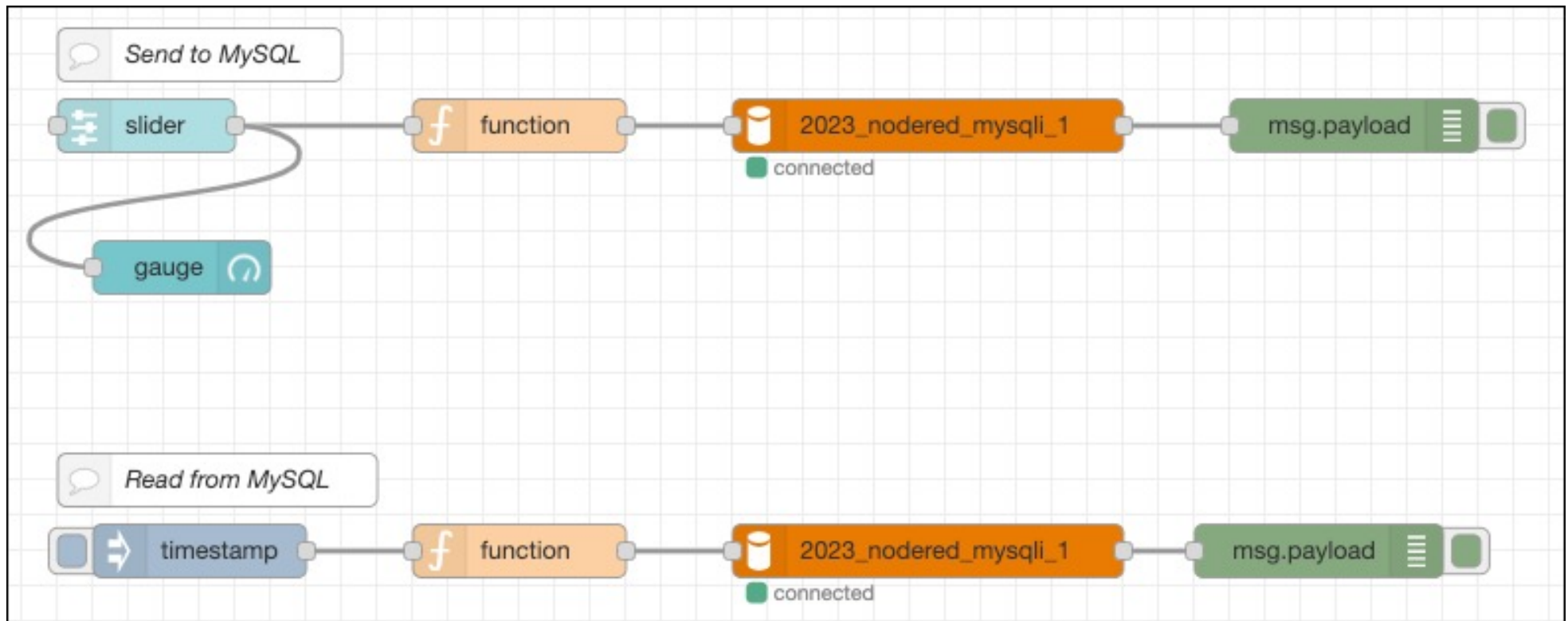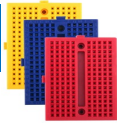√ Table Name: **example1**

Database name   Table name

B. Node-RED:
√ Project Setup

C. Node-RED to MySQL:
√ Project Description

The function node code reads:

```
// Get System Current date
var d = new Date();

// Generate a random number between 1 and 100 (adjust the range as needed)
const min = 1;
const max = 100;
const randomNum = Math.floor(Math.random() * (max - min + 1)) + min;

//msg.payload comes from slider


//var time1=new Time();
msg.topic = "INSERT INTO example1 (log_from_nodered, data1, data2) " +
"VALUES ('"+d+"', '"+msg.payload+"', '"+randomNum+"');";
return msg;
```
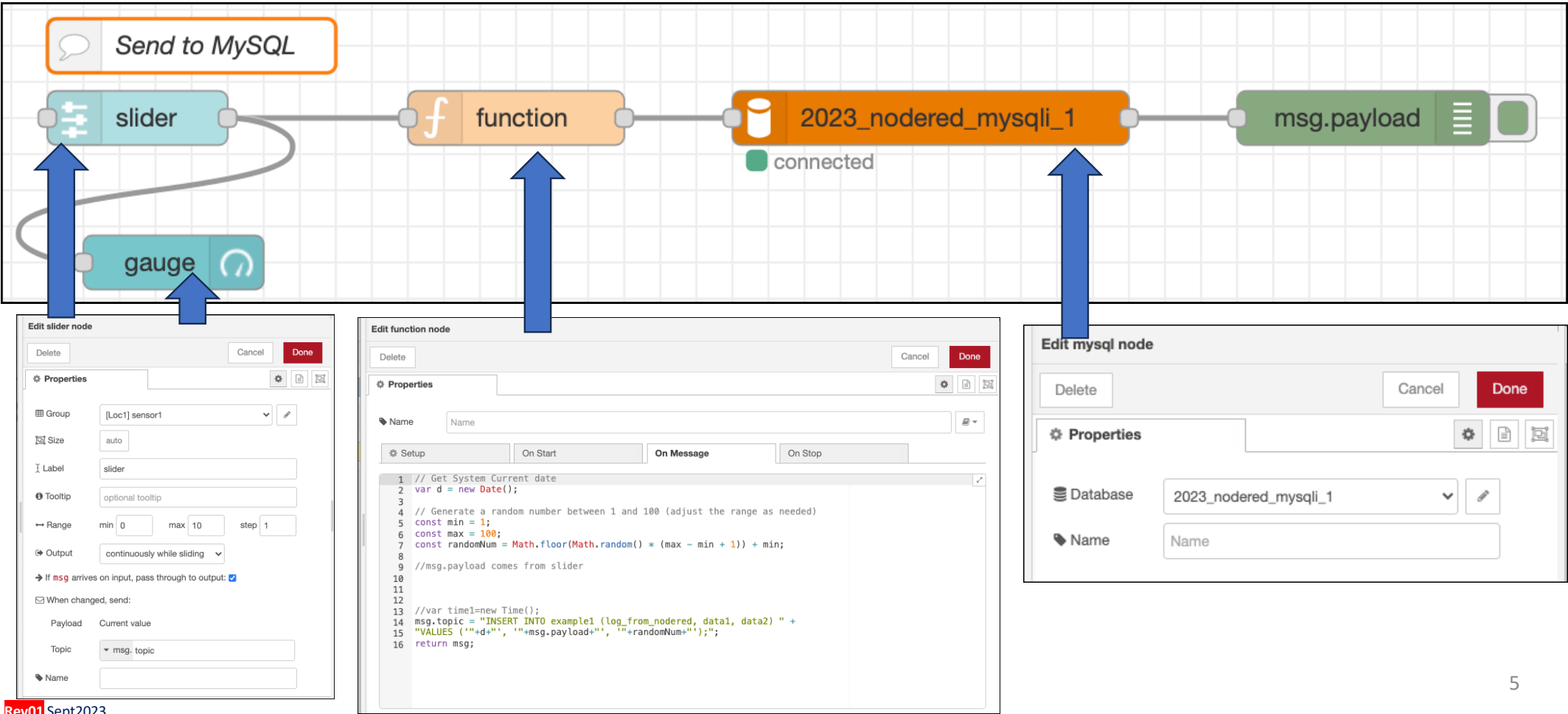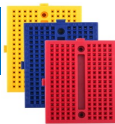
C. Node-RED to MySQL:
√ Project Properties
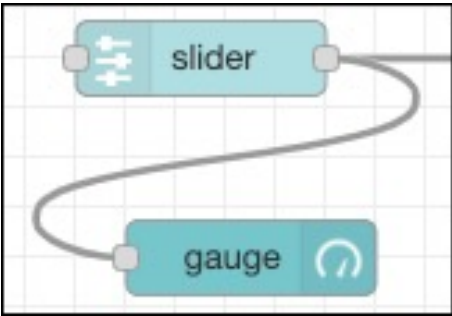
Edit slider node

Delete   Cancel   Done

⚙ Properties

▦ Group	[Loc1] sensor1
▣ Size	auto
I Label	slider
❶ Tooltip	optional tooltip
↔ Range	min 0 max 10 step 1
➡ Output	continuously while sliding

→ If msg arrives on input, pass through to output: ☑

✉ When changed, send:

    Payload   Current value

    Topic   ▾ msg. topic

🏷 Name

Edit gauge node

Delete   Cancel   Done

⚙ Properties

▦ Group	[Loc1] sensor1
▣ Size	auto
≣ Type	Gauge
I Label	gauge
I Value format	{{value}}
I Units	units
Range	min 0 max 10
Colour gradient	🟩 🟨 🟥
Sectors	0 ... optional ... optional ... 10
🏷 Name	

|ılıl dashboard | ⓘ | 📕 | 🐞 | ▾ |

| Layout | Site | Theme ↗ |

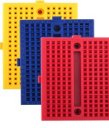**Tabs & Links**   ⌃ ⌄ +tab +link
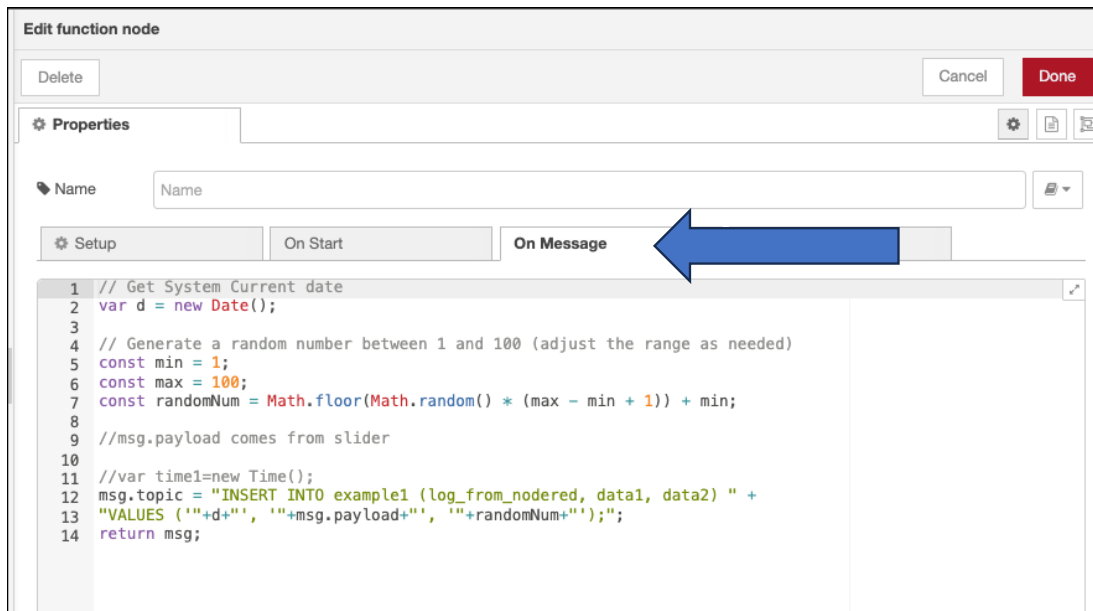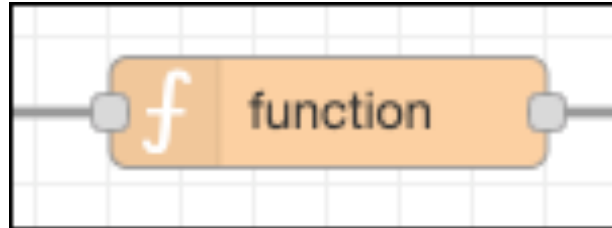
∨ ▣ Loc1
   ∨ ▦ sensor1
     🖼 gauge
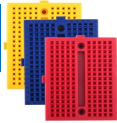   🖼 slider

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C. Node-RED to MySQL:
√ Project Properties


```
// Get System Current date
var d = new Date();

// Generate a random number between 1 and 100 (adjust the range as needed)
const min = 1;
const max = 100;
const randomNum = Math.floor(Math.random() * (max - min + 1)) + min;

//msg.payload comes from slider

//var time1=new Time();
msg.topic = "INSERT INTO example1 (log_from_nodered, data1, data2) " +
"VALUES ('"+d+"', '"+msg.payload+"', '"+randomNum+"');";
return msg;
```

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C. Node-RED to MySQL:
√ The Results
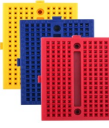
D. MySQL to Node-RED:
√ Project Description

// Select ALL from example1 Descending id
msg.topic = "SELECT * FROM example1 order by id desc";
return msg;
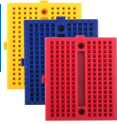
E. MySQL to Node-RED:
√ The Results

END