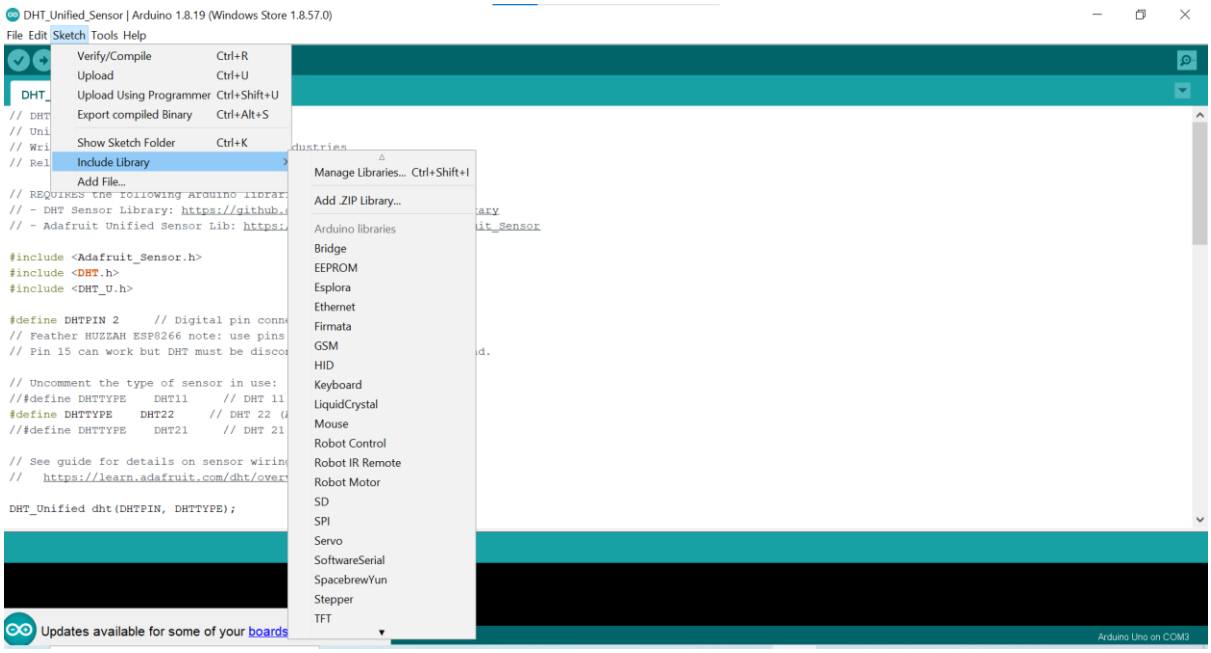
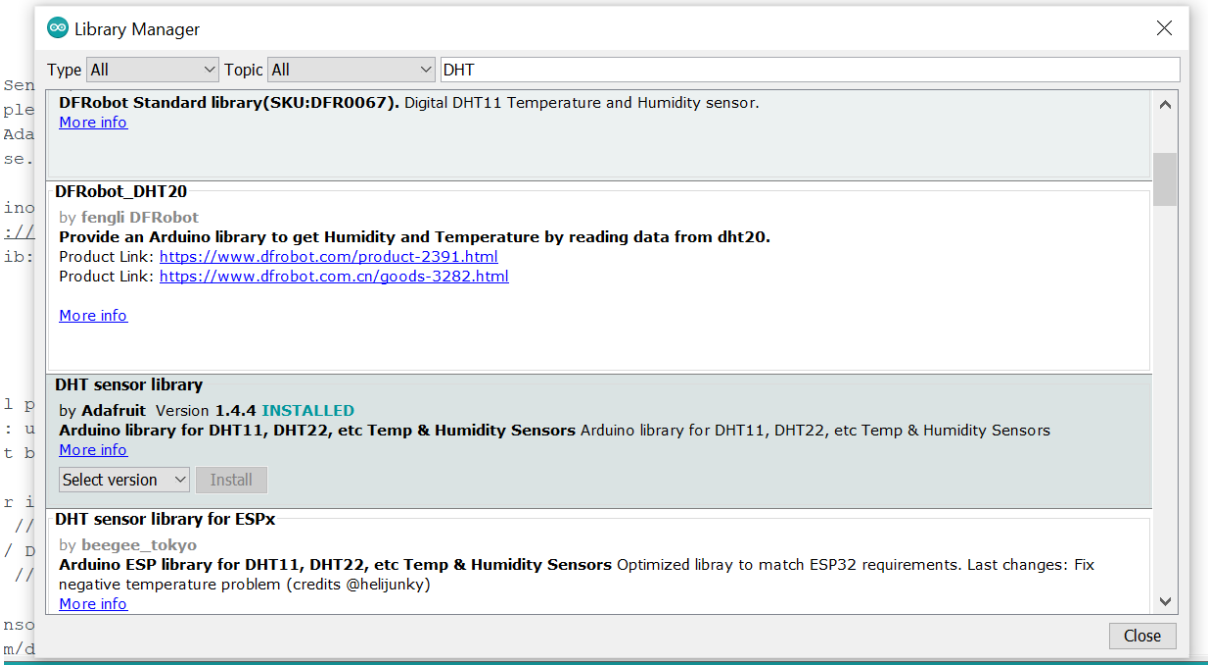
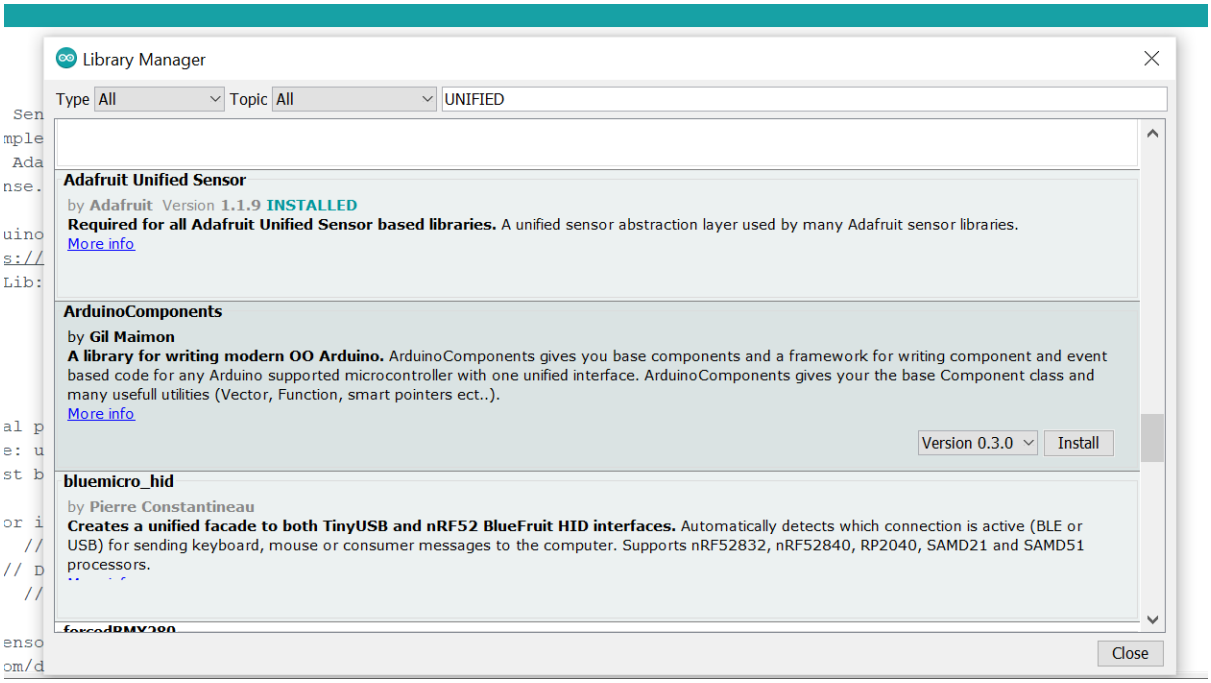
Temperature, humidity sensing with Arduino and node red dashboard



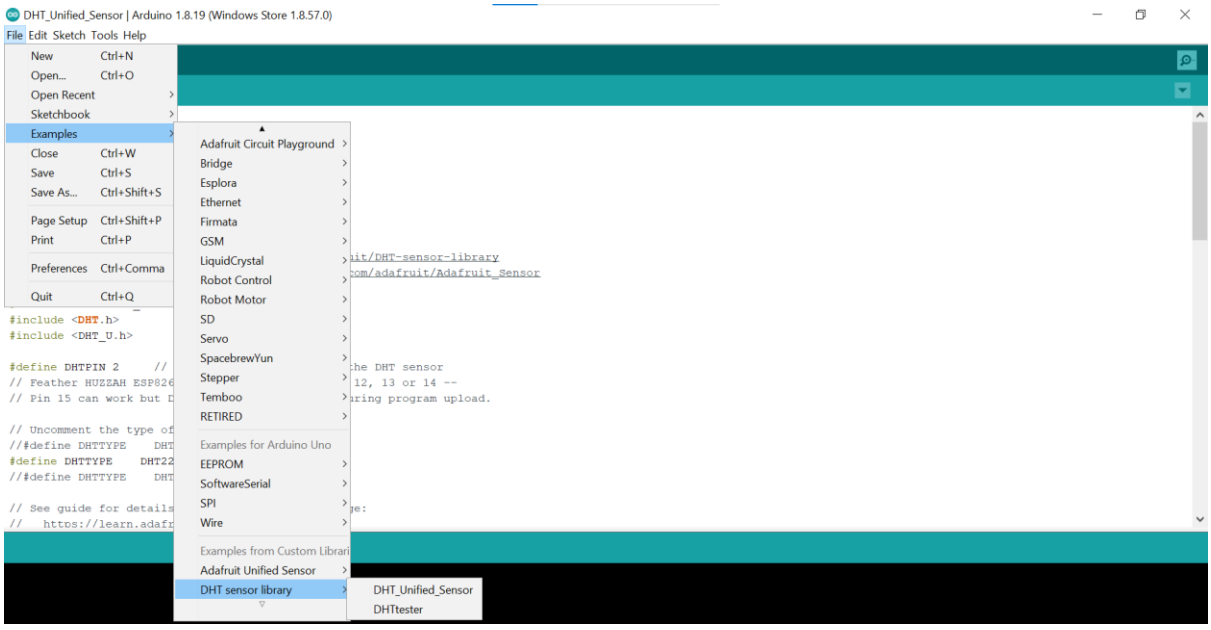
Click manage libraries



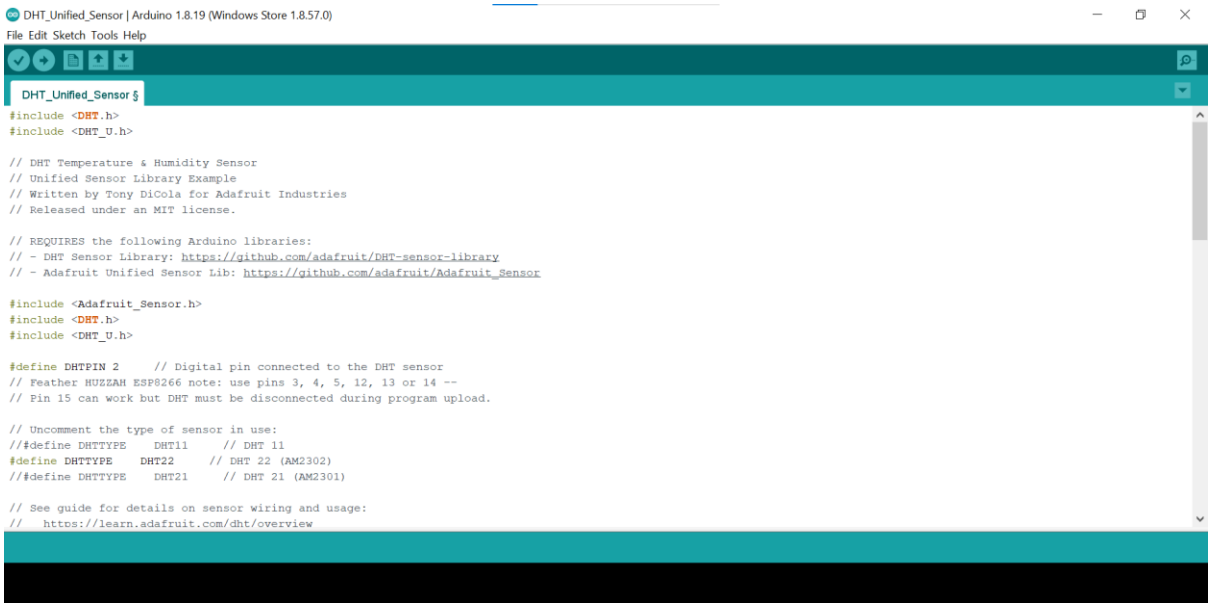
INSTALL DHT SENSOR LIBRARY



Make sure adafruit unified sensor is installed

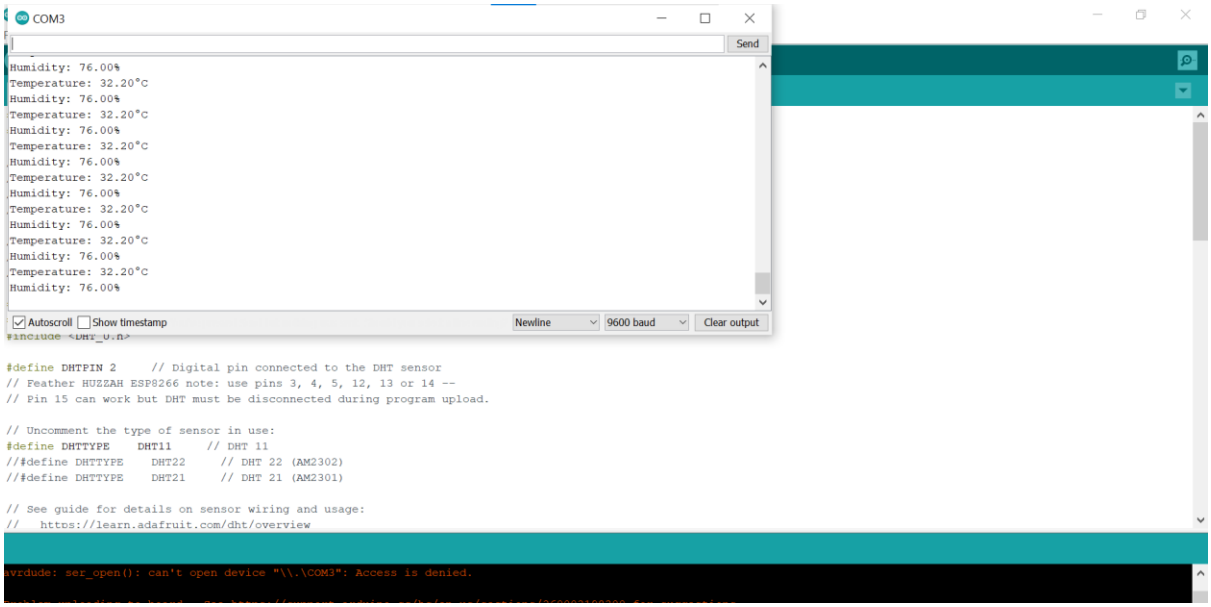


Choose DHT unified sensor

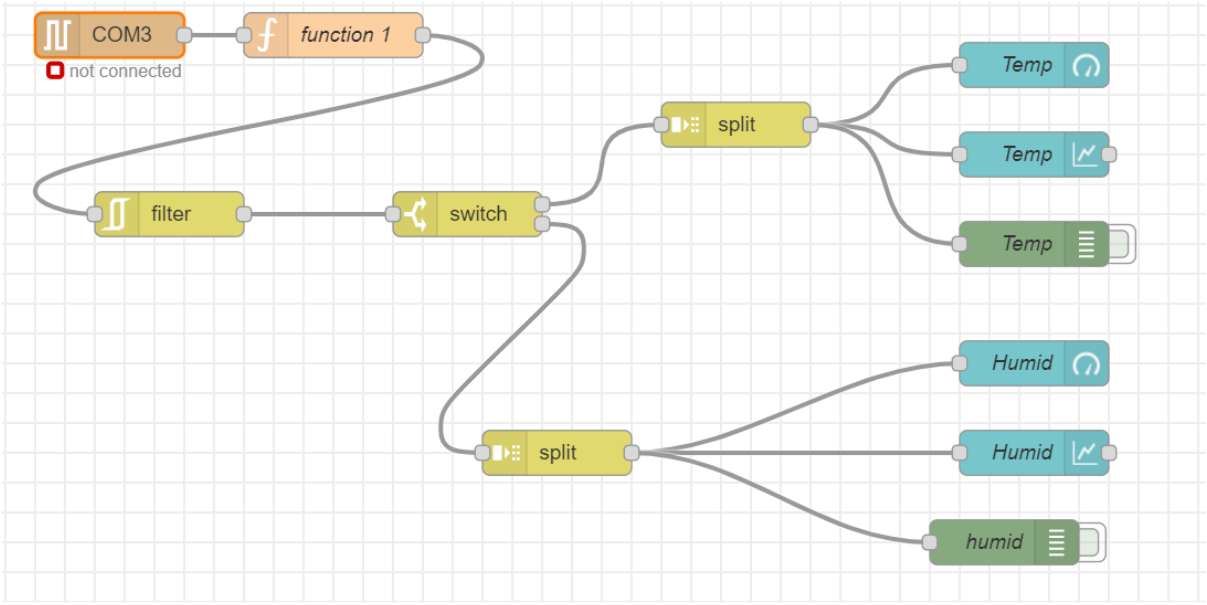


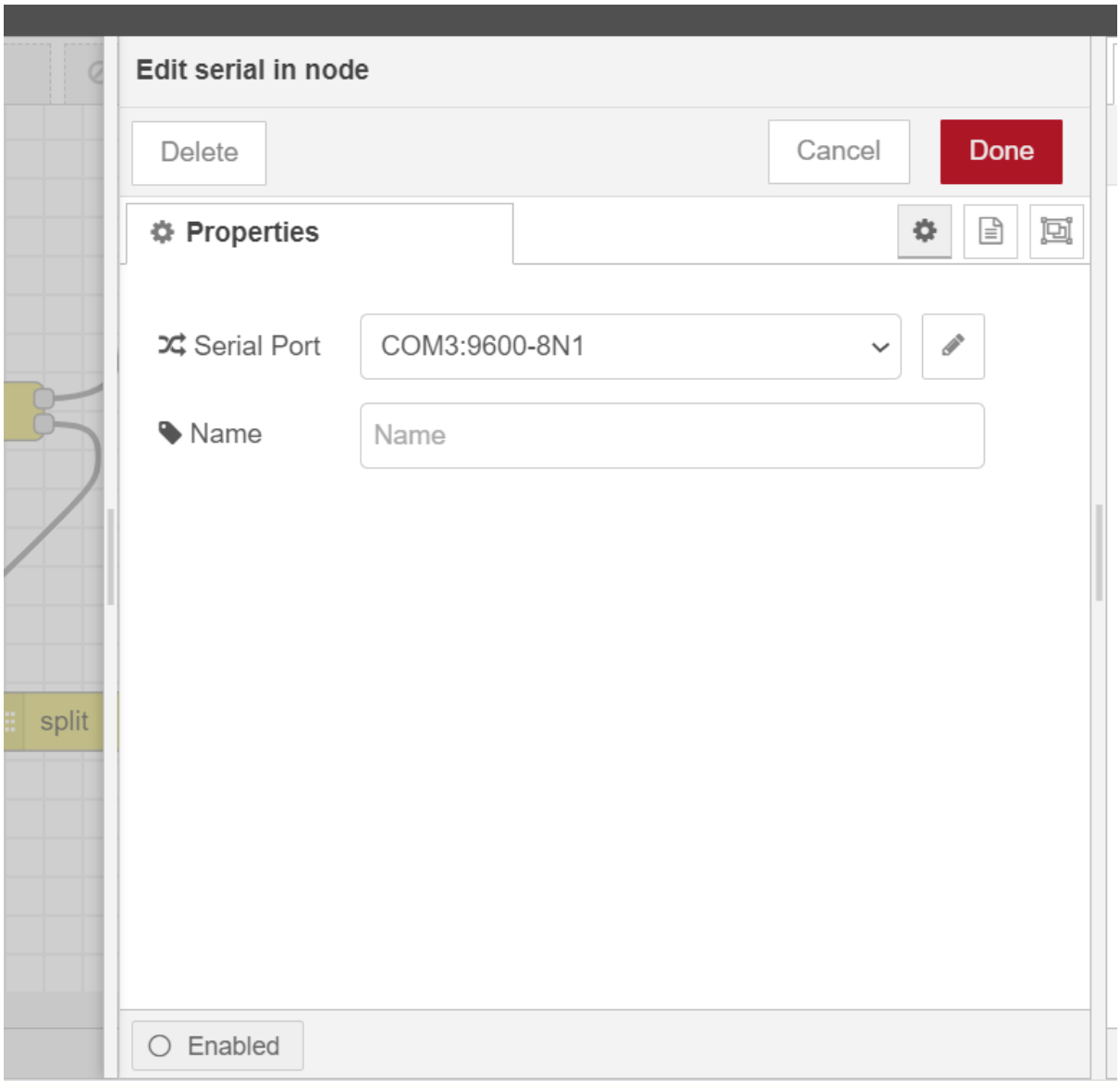
I am using DHT11 so

Click serial monitor

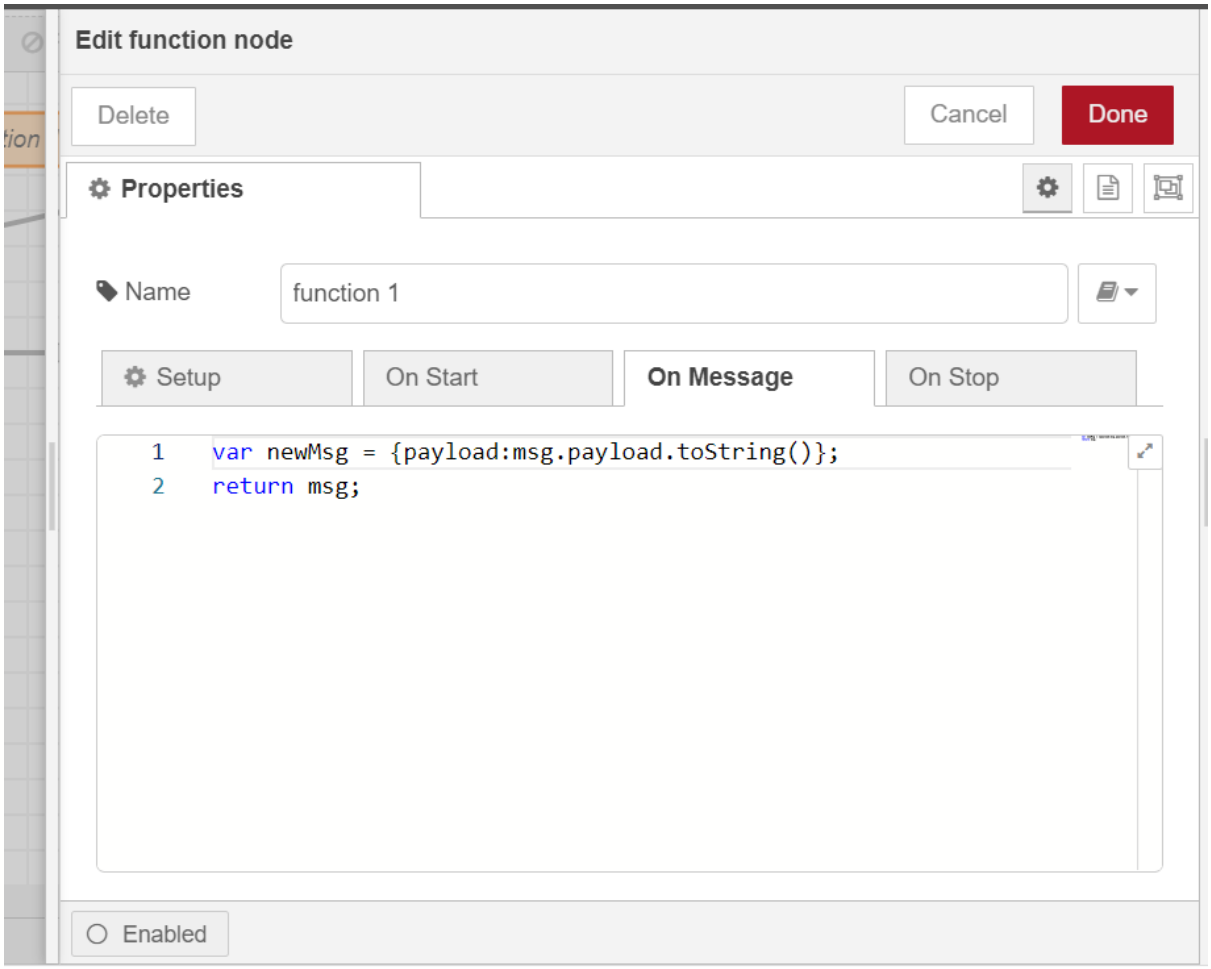


Go to node red

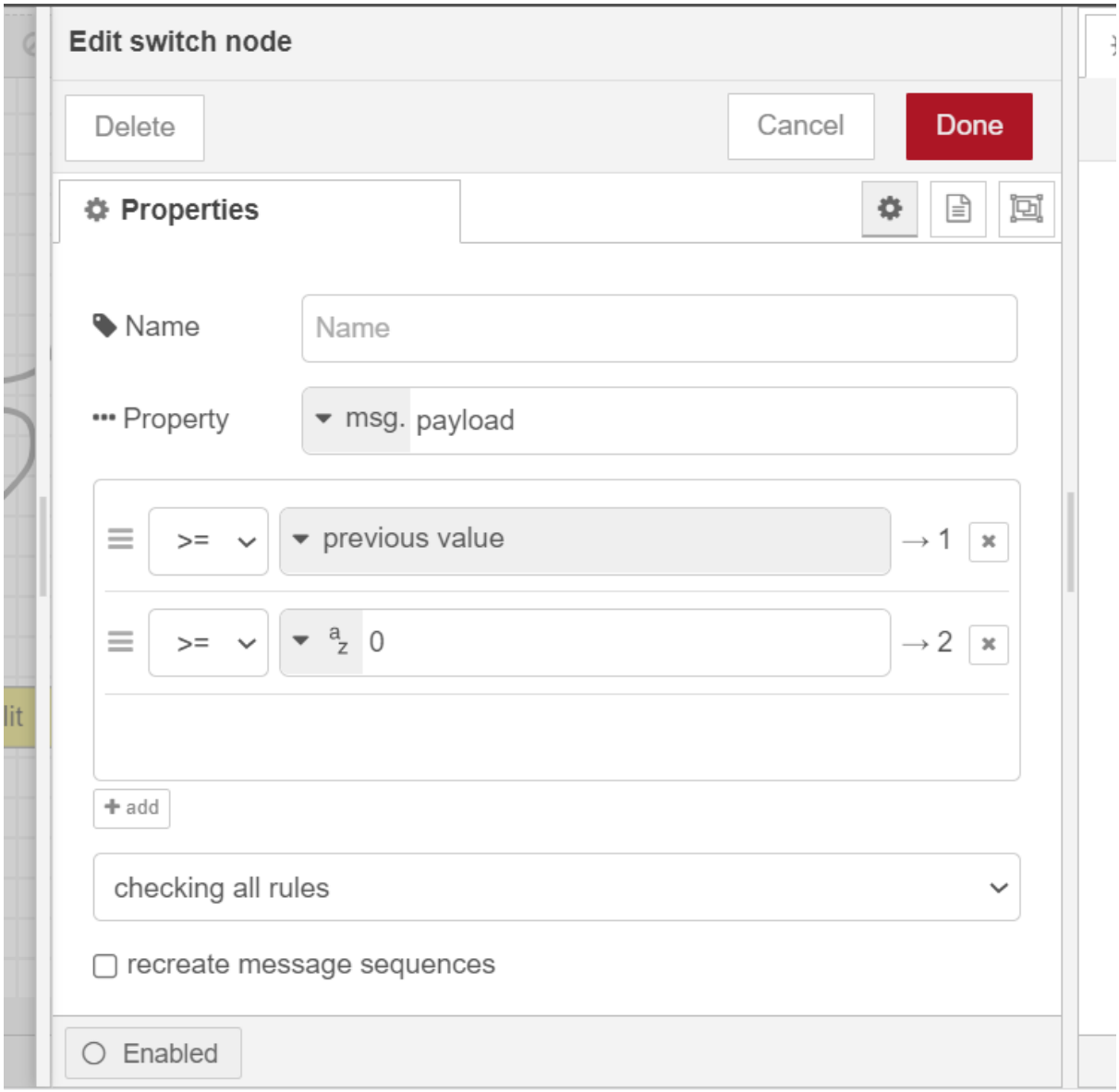

COM3
not connected
function 1
filter
switch
split
Temp
Temp
Temp
split
Humid
Humid
humid

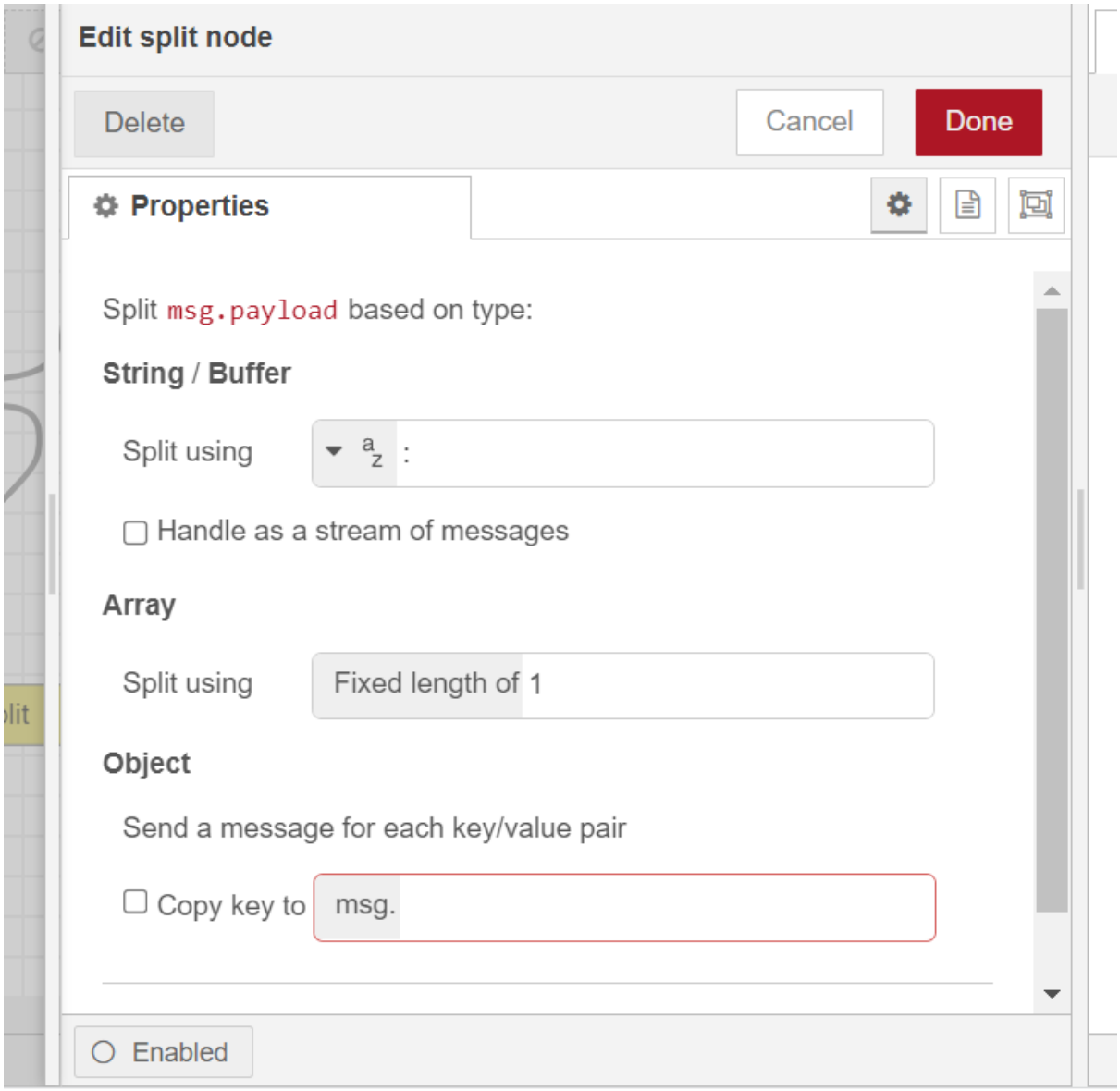

Edit serial in node
Delete
Cancel
Done
Properties
Serial Port
COM3:9600-8N1
Name
Name
Enabled
split

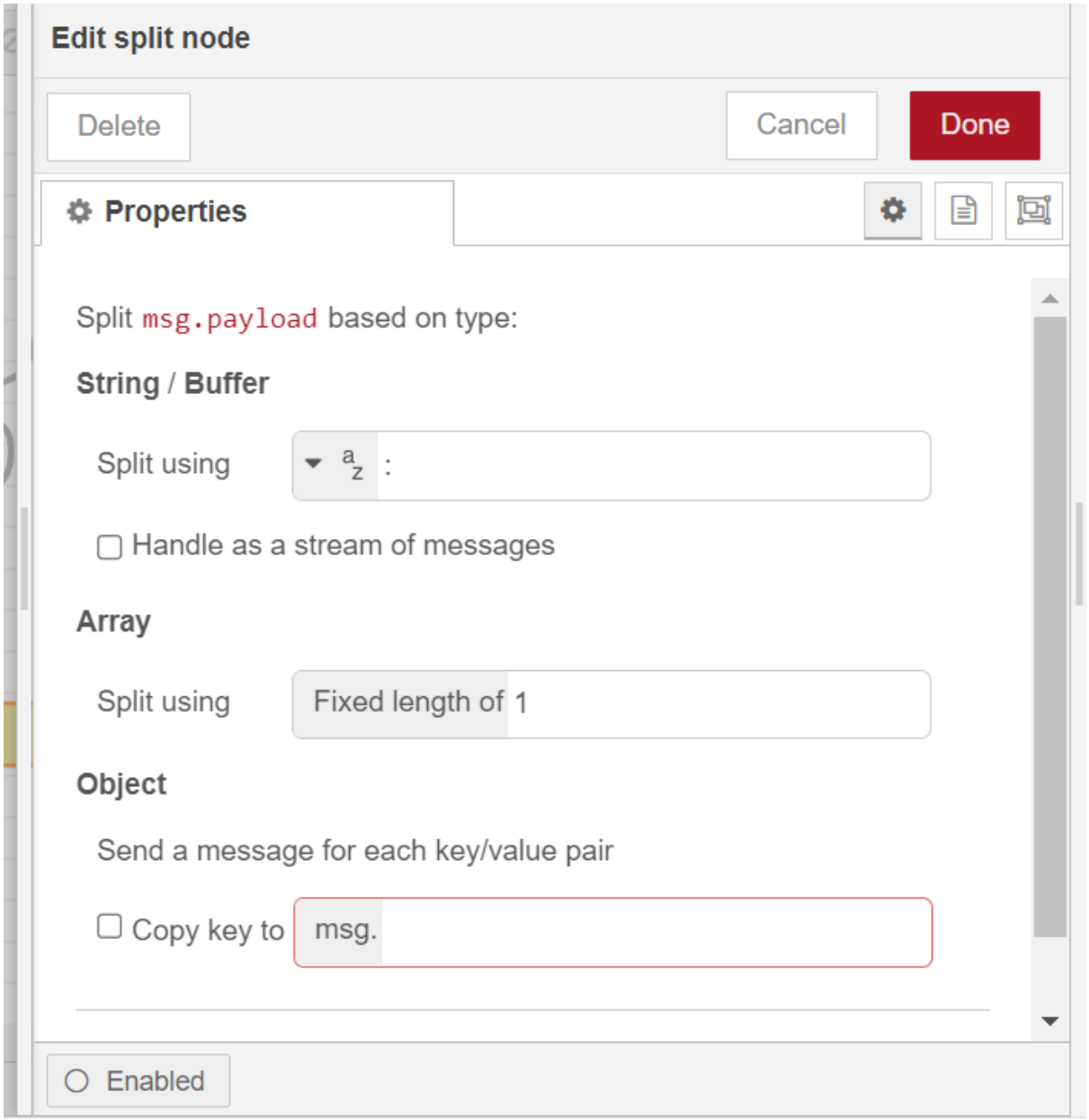
-

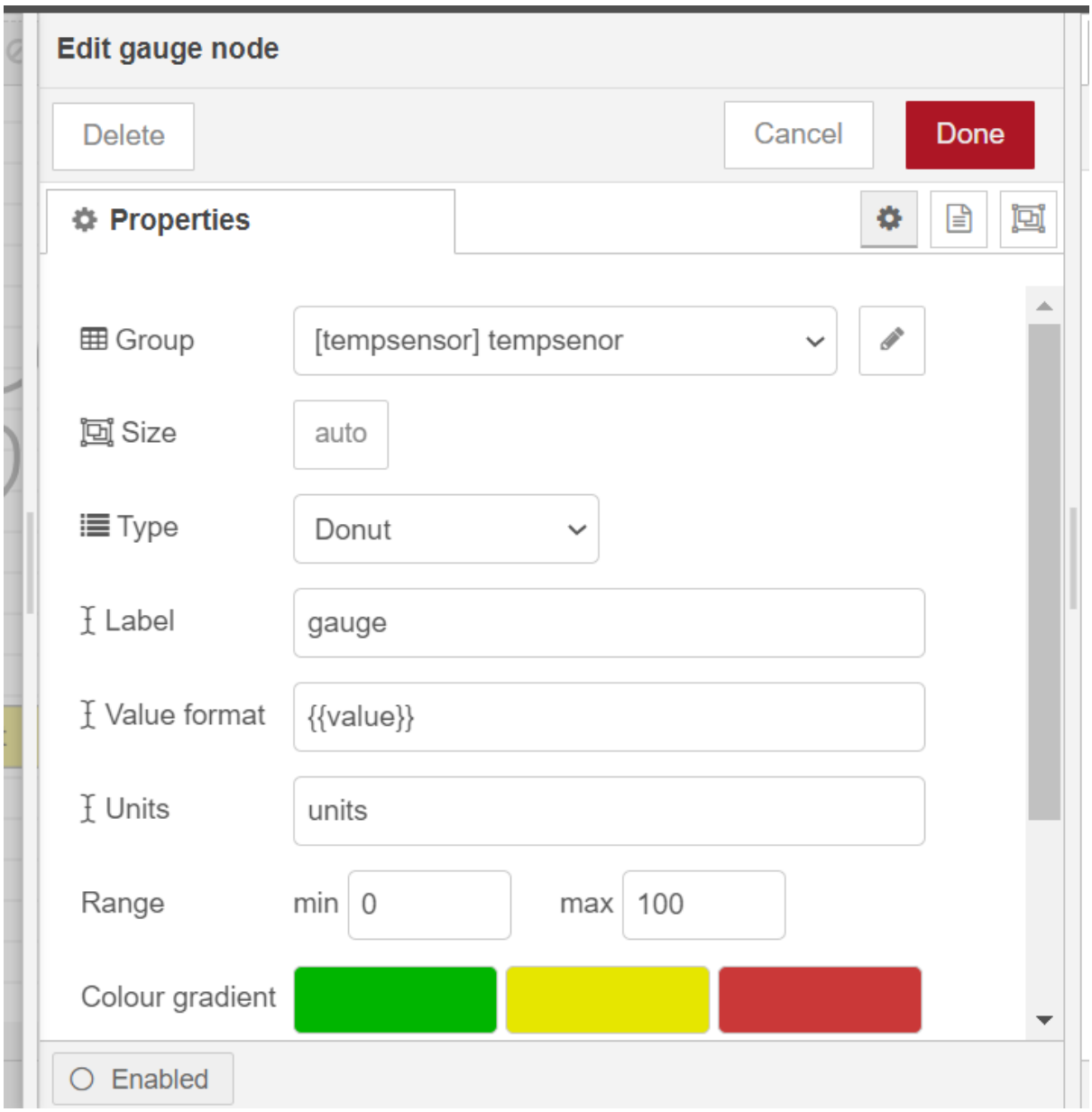


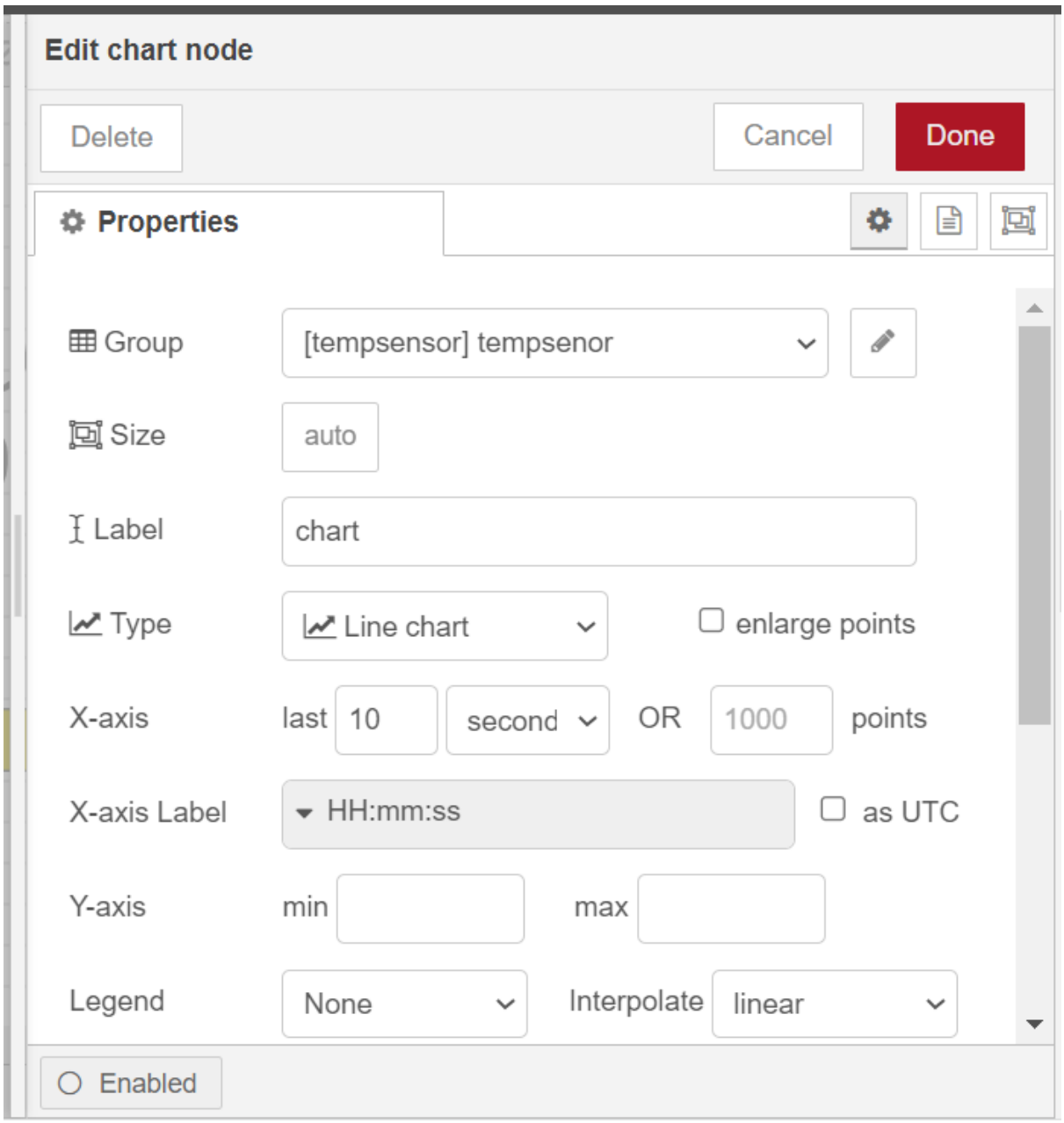

```
var newMsg = {payload:msg.payload.toString()};

return msg;
```

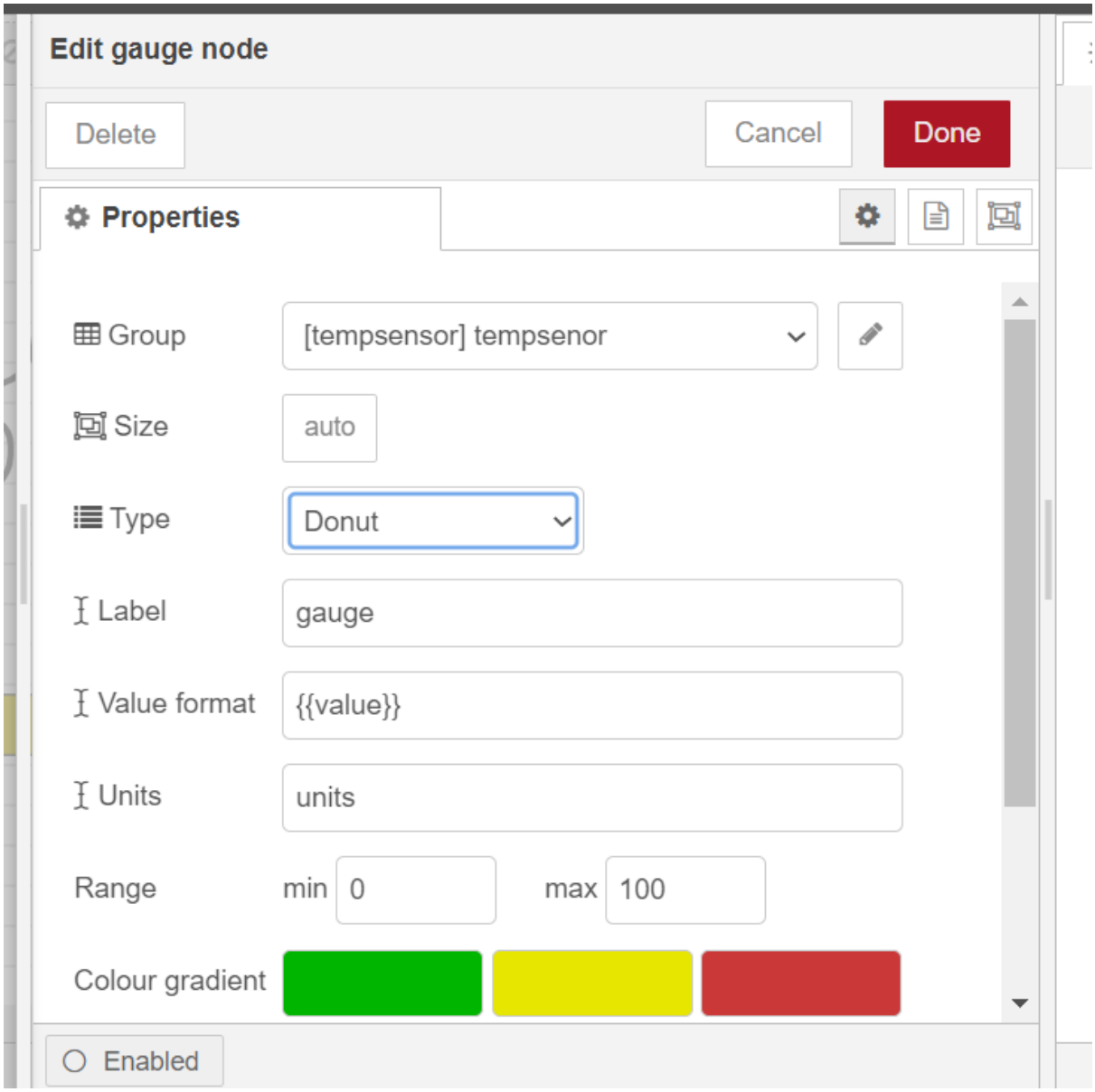

Edit switch node
Delete
Cancel
Done
Properties
Name
Name
Property
msg. payload
>=
previous value
→ 1
>=
0
→ 2
add
checking all rules
recreate message sequences
Enabled

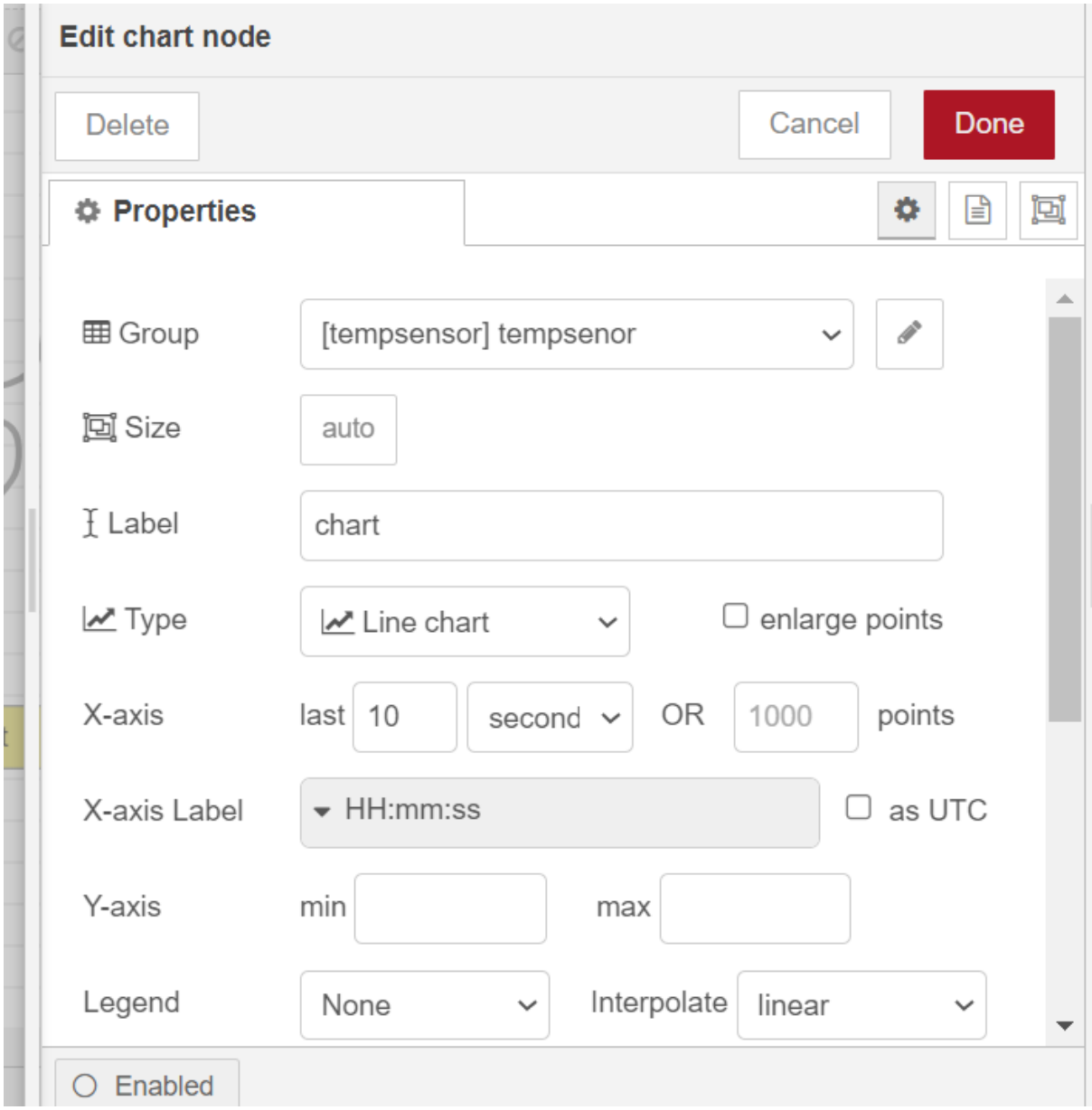

Edit split node
Delete
Cancel
Done
Properties
Split msg.payload based on type:
String / Buffer
Split using
:
Handle as a stream of messages
Array
Split using
Fixed length of 1
Object
Send a message for each key/value pair
Copy key to
msg.
Enabled


Edit split node
Delete
Cancel
Done
Properties
Split msg.payload based on type:
String / Buffer
Split using
:
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
[tempsensor] tempsenor
Size
auto
Type
Donut
Label
gauge
Value format
{{value}}
Units
units
Range
min
0
max
100
Colour gradient
Enabled

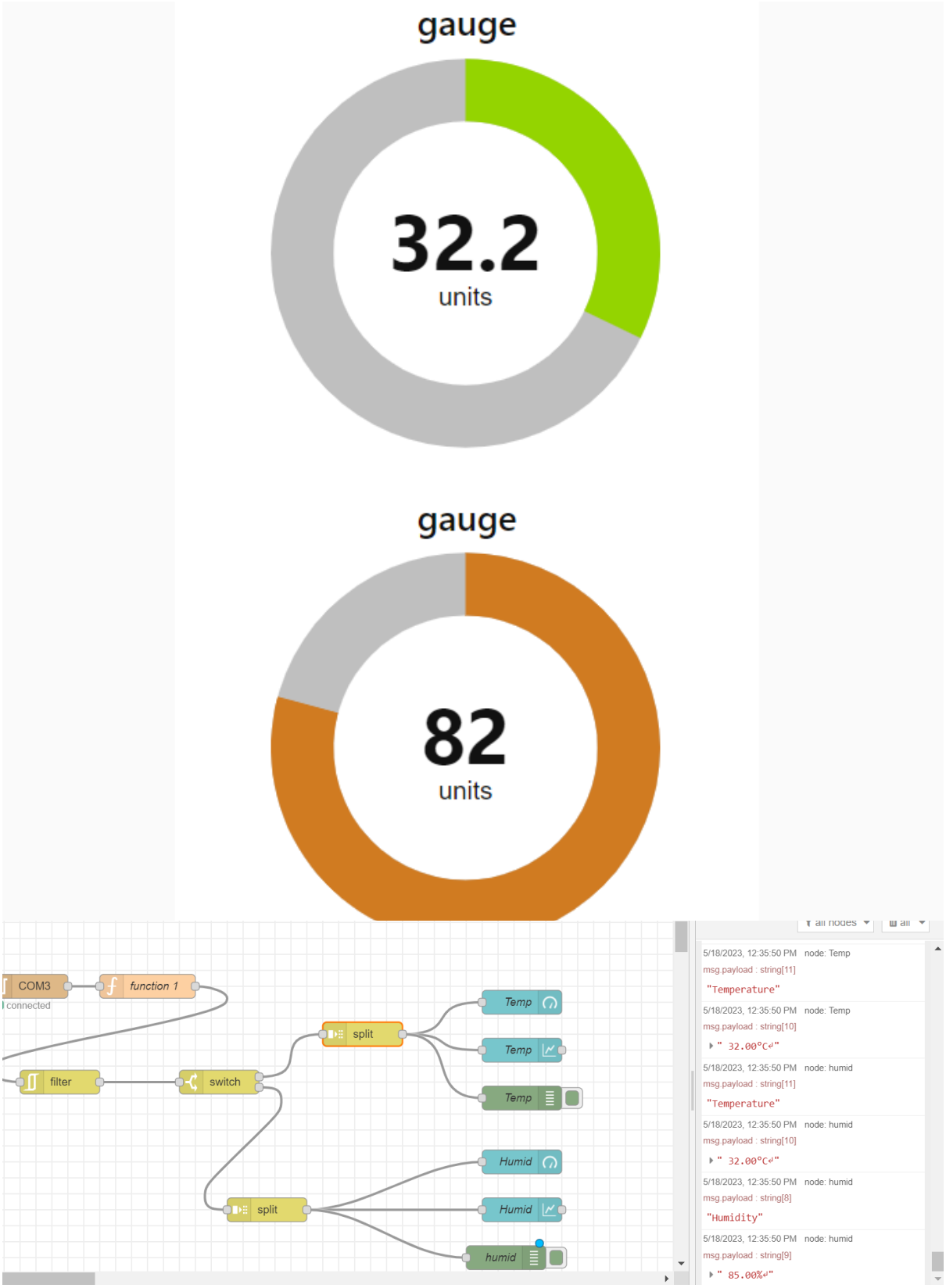

Edit chart node
Delete
Cancel
Done
Properties
Group
[tempsensor] tempsenor
Size
auto
Label
chart
Type
Line chart
enlarge points
X-axis
last
10
second
OR
1000
points
X-axis Label
HH:mm:ss
as UTC
Y-axis
min
max
Legend
None
Interpolate
linear
Enabled


Edit gauge node
Delete
Cancel
Done
Properties
Group
[tempsensor] tempsenor
Size
auto
Type
Donut
Label
gauge
Value format
{{value}}
Units
units
Range
min
0
max
100
Colour gradient
Enabled



Close the com output in arduino

Deploy and ui


gauge
32.2
units
gauge
82
units
COM3
connected
function 1
filter
switch
split
split
Temp
Temp
Temp
Humid
Humid
humid
5/18/2023, 12:35:50 PM node: Temp
msg.payload : string[11]
"Temperature"
5/18/2023, 12:35:50 PM node: Temp
msg.payload : string[10]
" 32.00°C"
5/18/2023, 12:35:50 PM node: humid
msg.payload : string[11]
"Temperature"
5/18/2023, 12:35:50 PM node: humid
msg.payload : string[10]
" 32.00°C"
5/18/2023, 12:35:50 PM node: humid
msg.payload : string[8]
"Humidity"
5/18/2023, 12:35:50 PM node: humid
msg.payload : string[9]
" 85.00%"

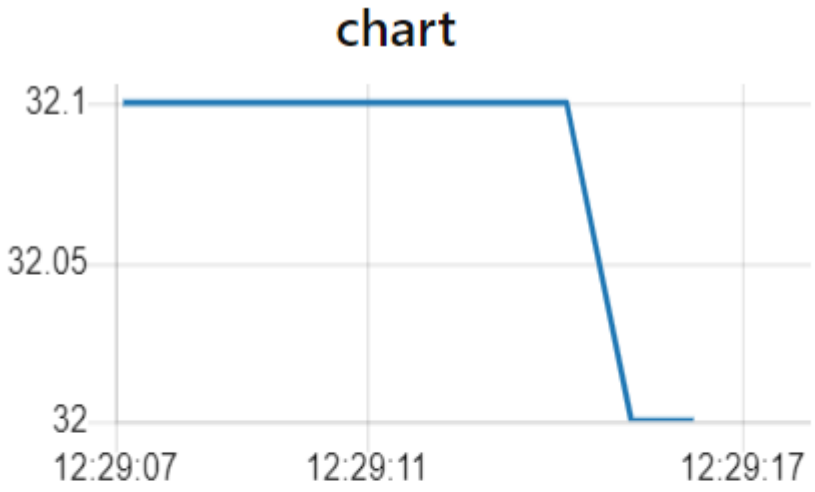


chart
32.1
32.05
32
12:29:07
12:29:11
12:29:17

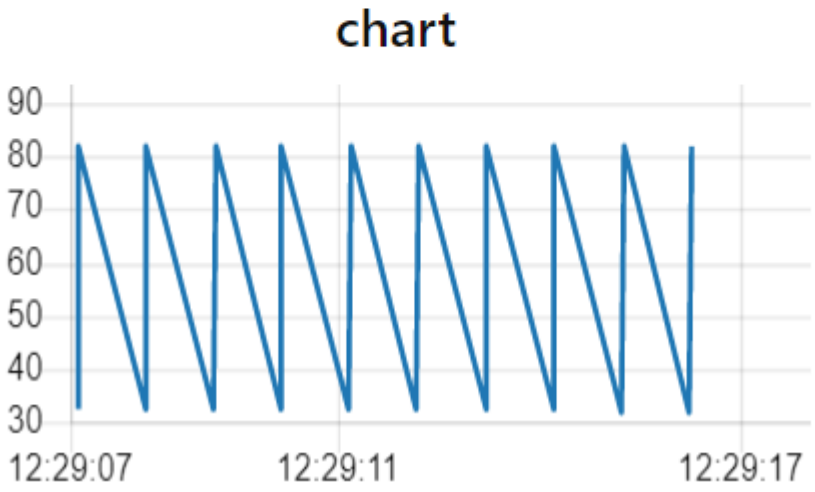


chart
90
80
70
60
50
40
30
12:29:07
12:29:11
12:29:17