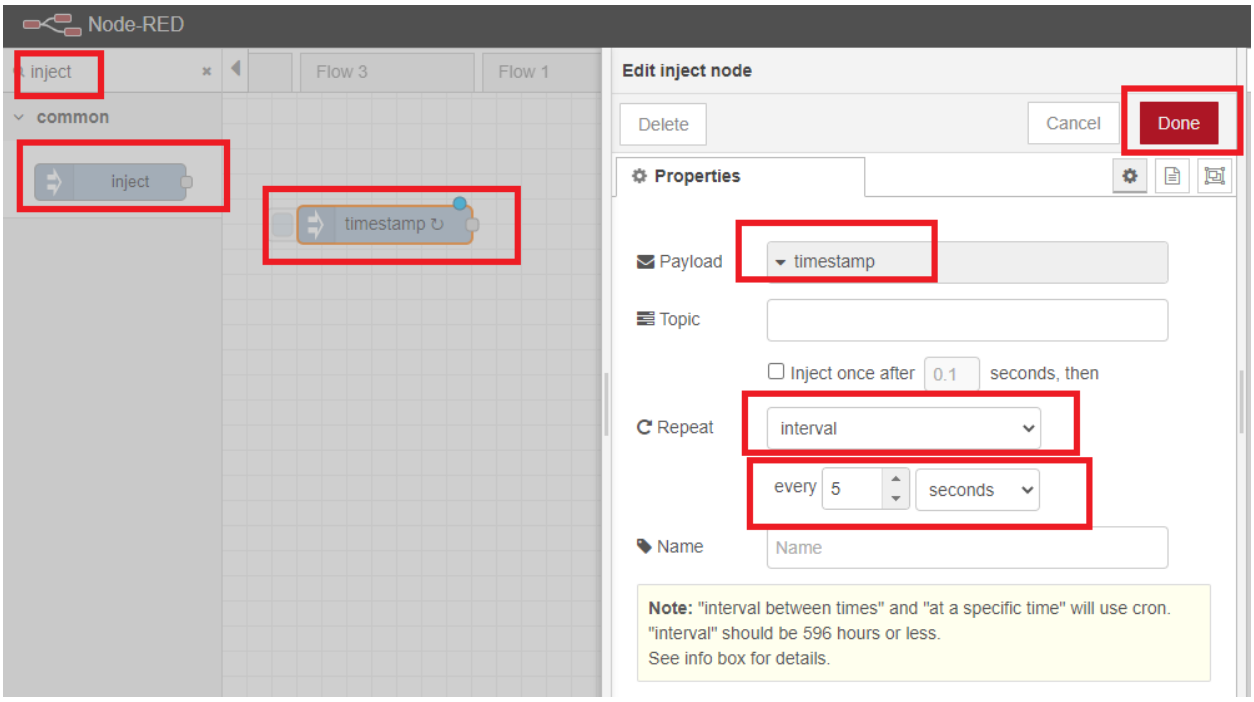
Visualize random data On Node-red dashboard:

This is a simple example of reading and visualizing data using the new UI nodes from node-red-dashboard. We'll be using our Node-RED engine and visualizing a simple random data feed to show how to create a simple dashboard that looks like this

Add an **Inject** Node:
let's configure the inject node to send a timestamp every 5 seconds by setting the **payload** to timestamp and the repeat field to an **interval of 5 seconds**. This will act as our repeating trigger.



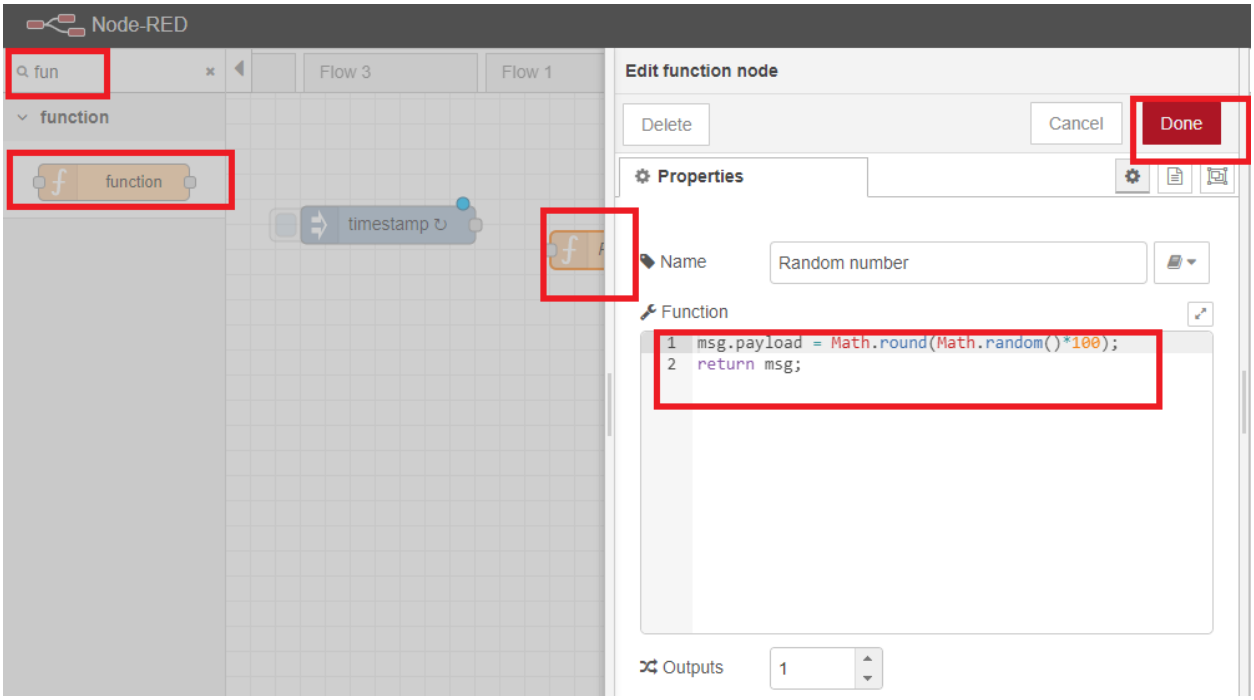
Add Function Node:

Now we need to set up the function node to generate a random number – we'll use a simple JS math function to do this:

That will generate a random number between 0 ~ 99 which is passed to the chart node.

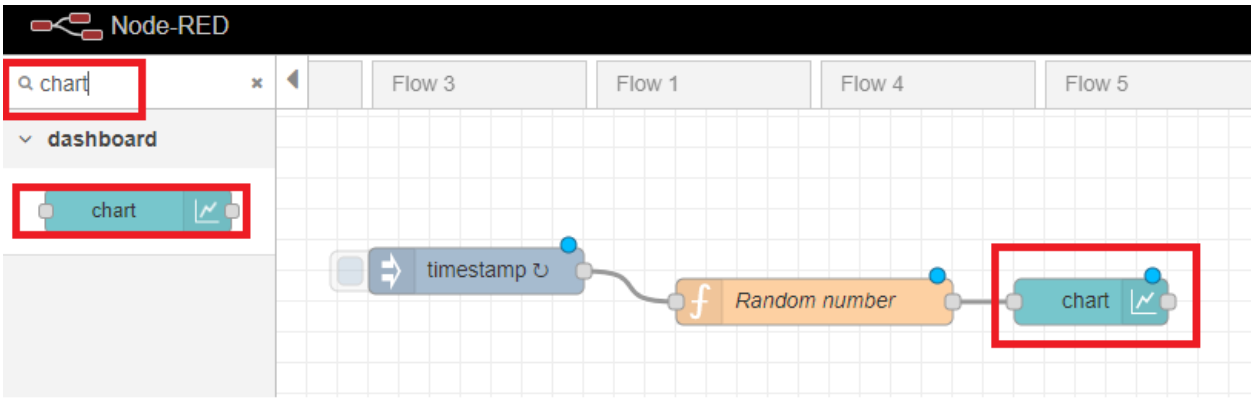
```
msg.payload = Math.round(Math.random()*100);

return msg;
```



Add chart Node:

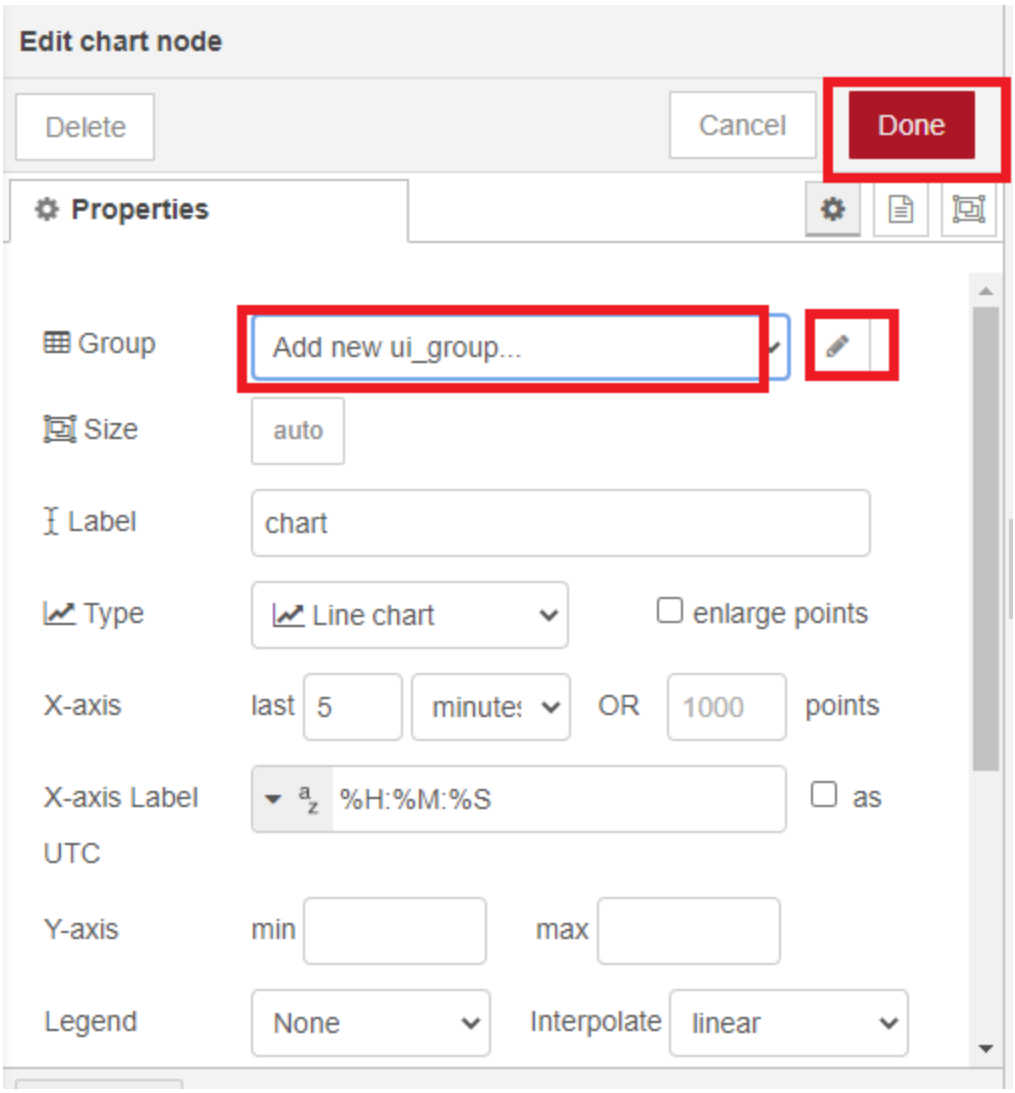
So now let’s take a look at the chart node.



Configure the properties:

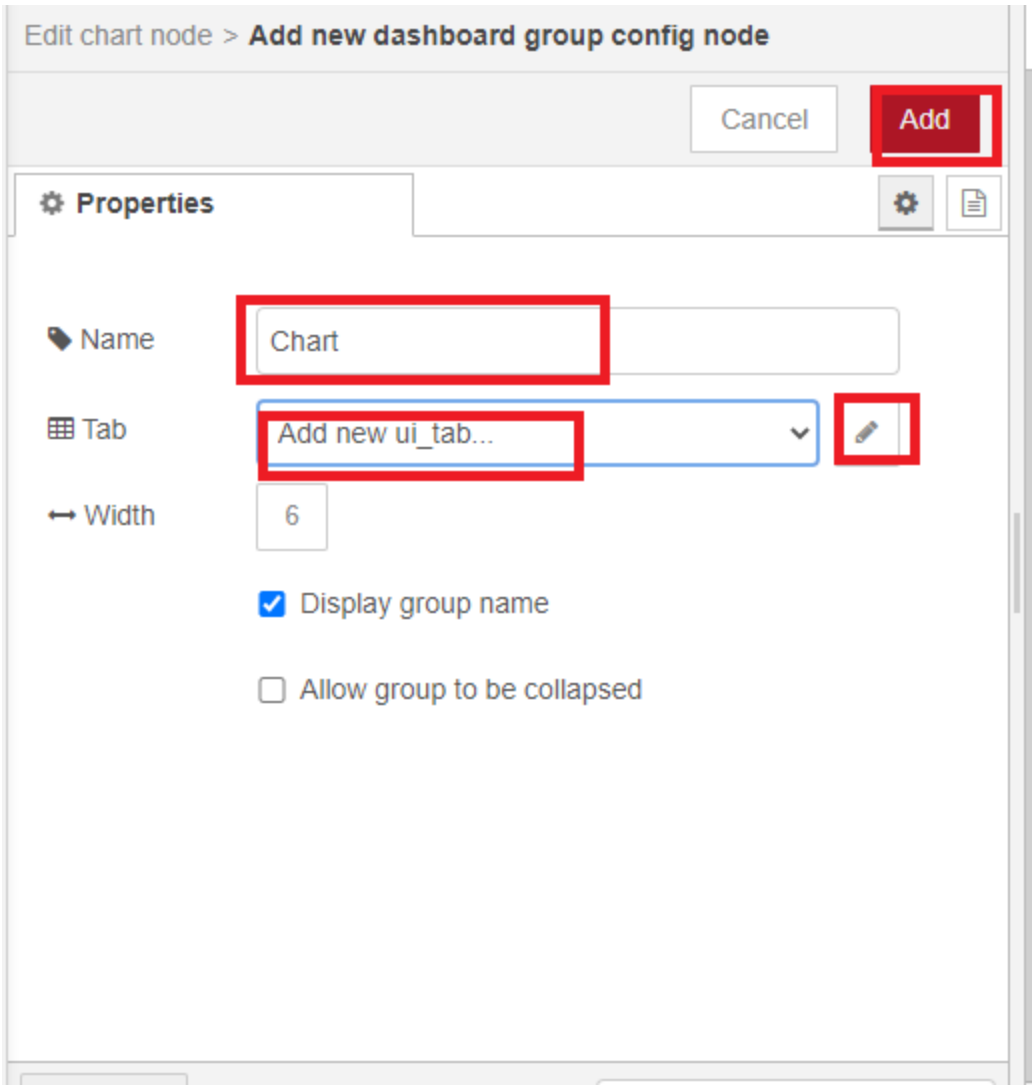
Add Group Name:

Give **Group** and **tab** name for the widget:
From Group section in the **left** , select **add new_ui_group** and click on Edit Icon

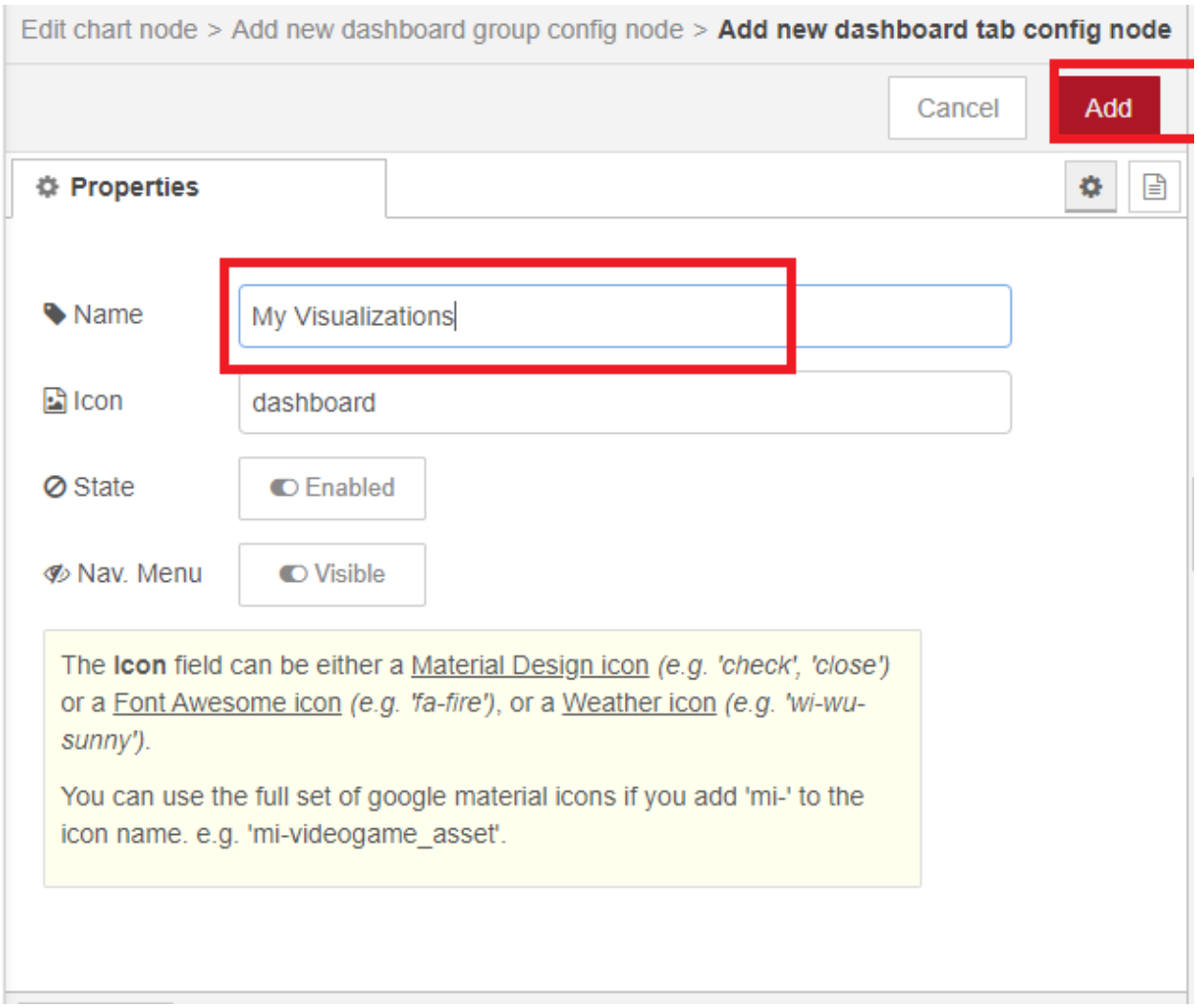


Your Group configuration window appears, Give a **name** (gave name as **Charts**) to you your group and

In the second tab option select **Add_new_ui_tab** and click on Edit Button



Another window opens where give the **name** of the **tab** (My visualizations) and click on add



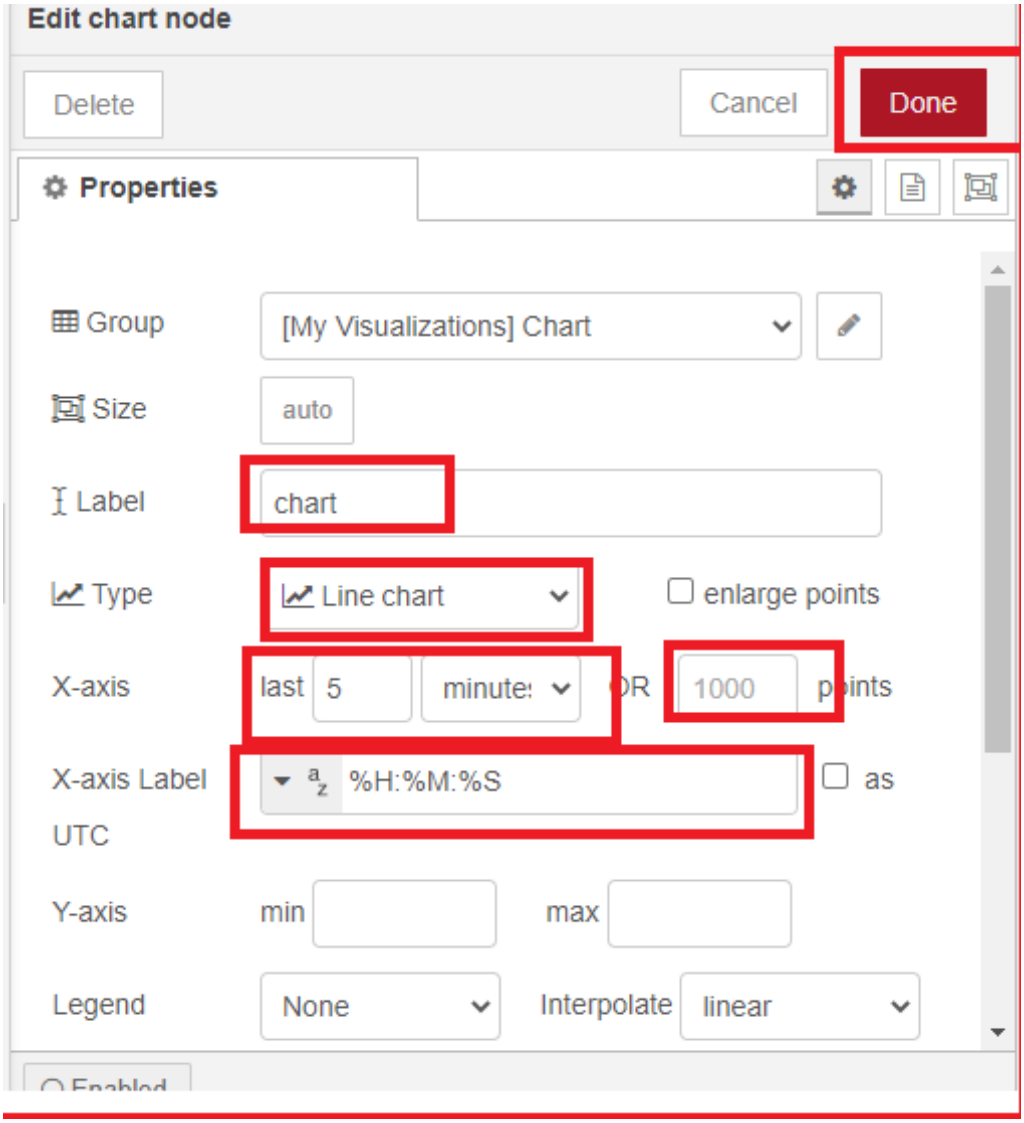
Another window pops un click on Add on that window, again another window pops up click on done

Note :

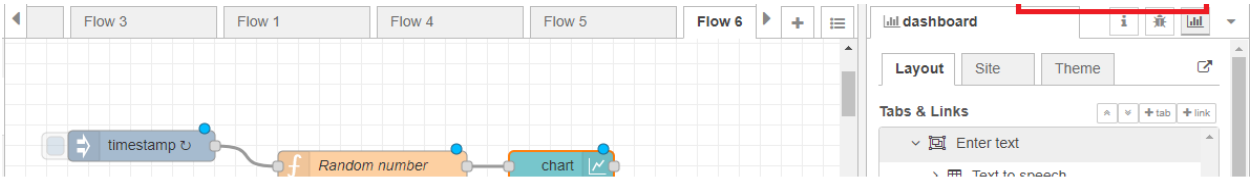
Group acts like title of the UI

Tab acts like Heading of UI

Give a label and properties as shown in the below figure



Connect all the nodes and click on **Deploy** and inject the flow

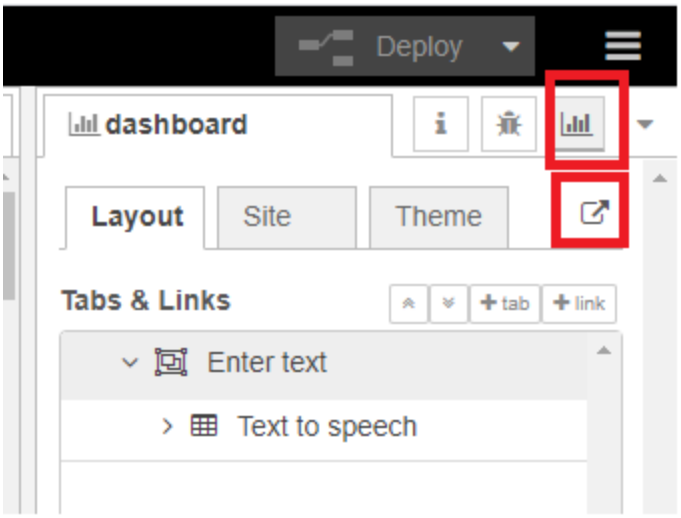


Open dashboard:

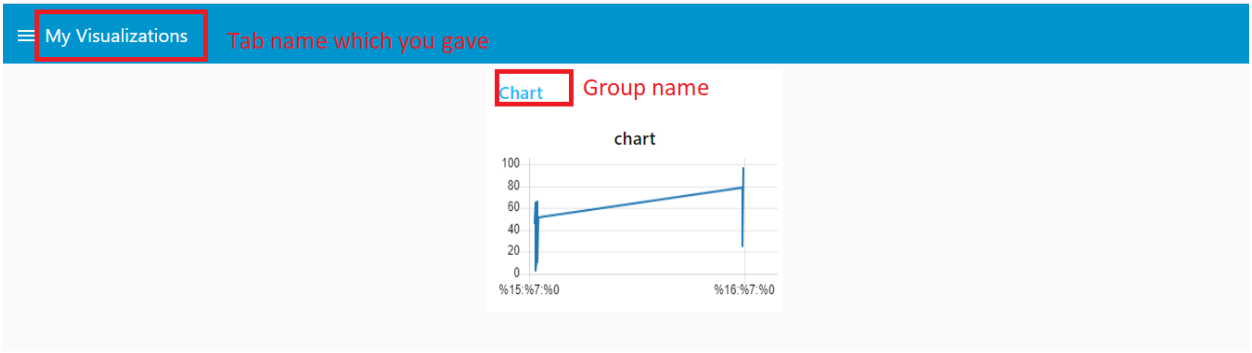
Open the Dashboard to see the result

Towards Right top click on graph icon

Click on pup out icon, you will get redirected to Your UI in the next tab



Open the tab where you can see your UI to enter the text and submit button to submit the text



Drag Gauge :

let's add a few other UI elements to our dashboard. Firstly let's create a gauge to show the last data value sent. Drag a **Gauge** node from the UI palette and wire it to the Random Number **function** node

We'll us the same Tab, home and we'll also add it to the same group – "Default[Home]". The Min and Max fields allow you to set the min and max values the gauge will shown. Make sure the max is set to 100 which is the most that the random number function node will generate. You can also change the Colour gradient to show different colours on the widget, but we will leave it as default for now.

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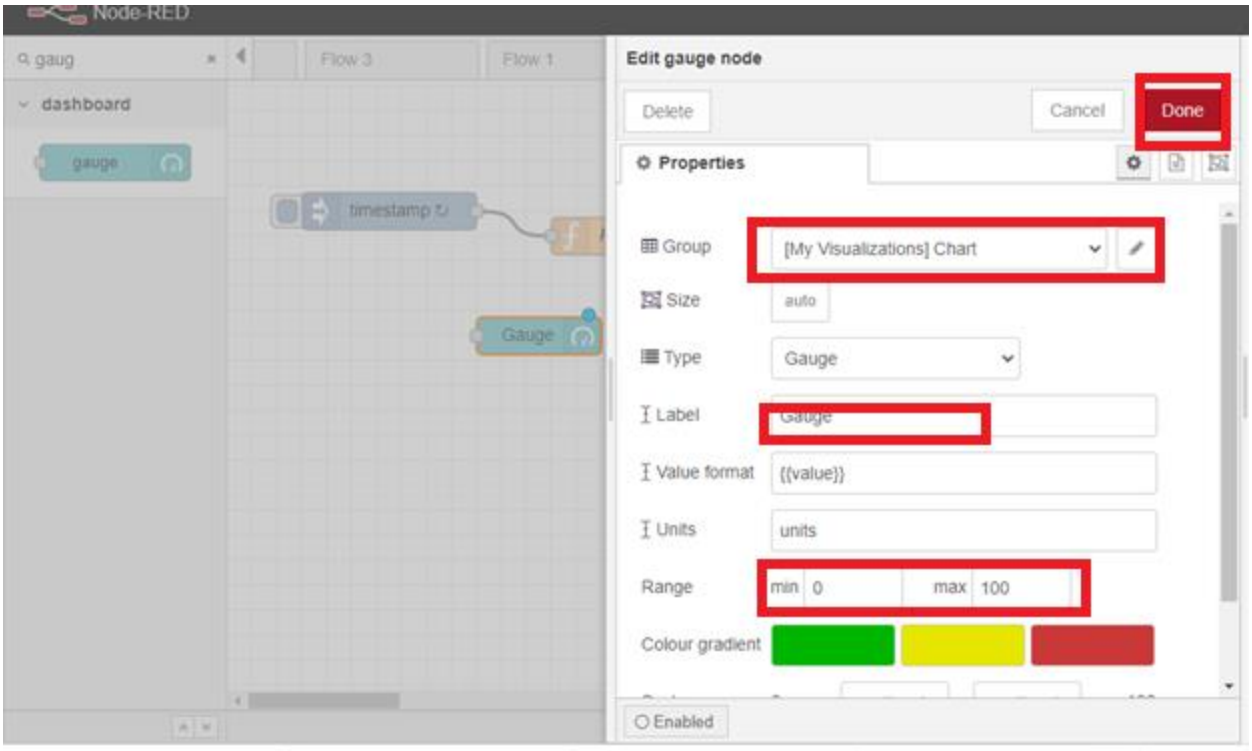
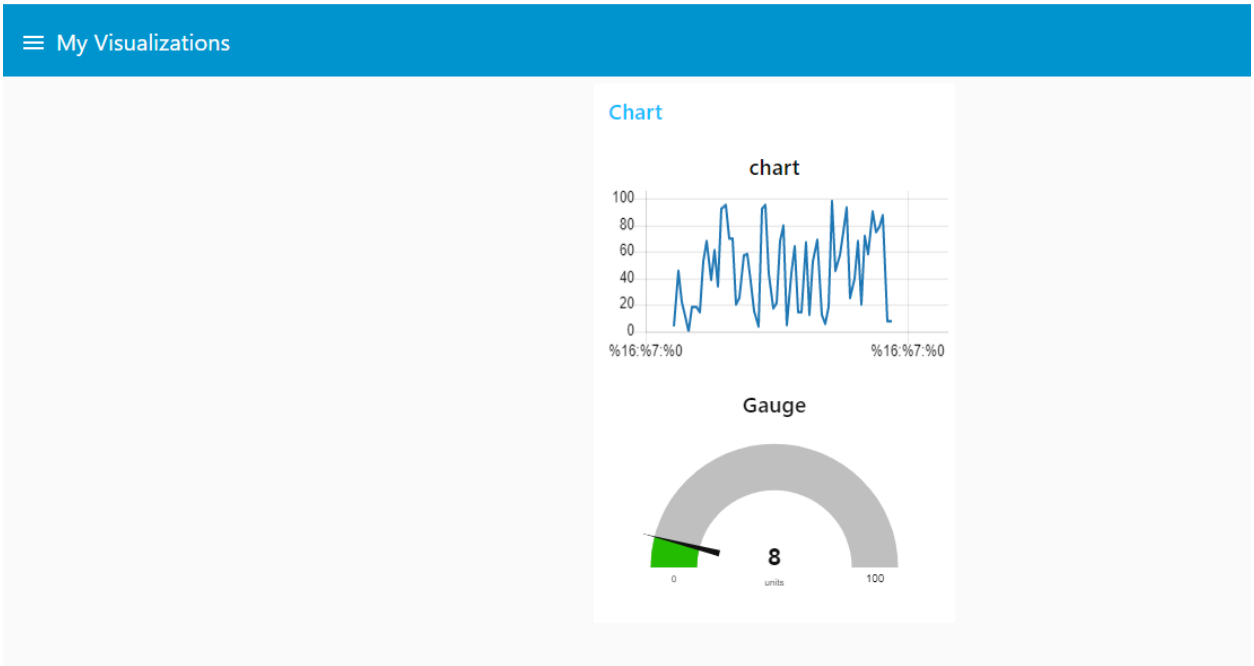
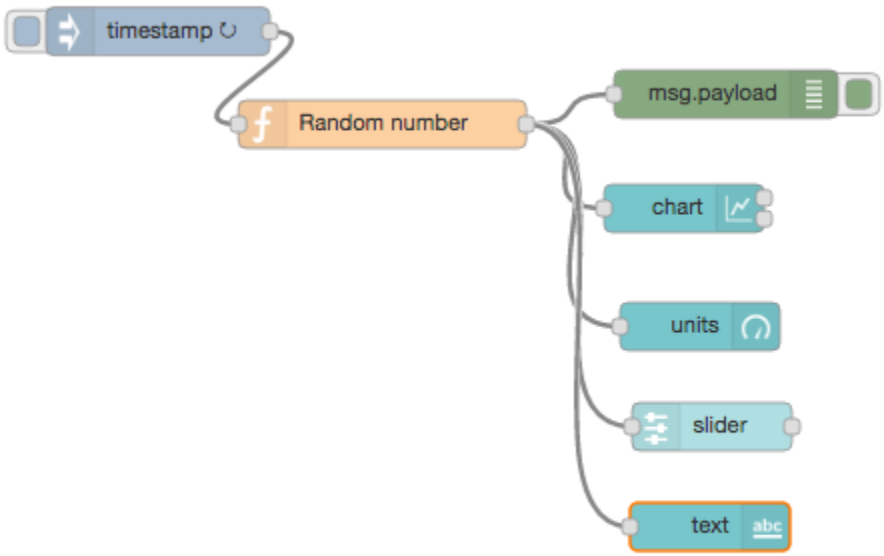


Hit deploy and then head over to your dashboard and you'll see that the chart and gauge are displayed in a group with the chart now showing the last 5 minutes of data and the gauge the latest value

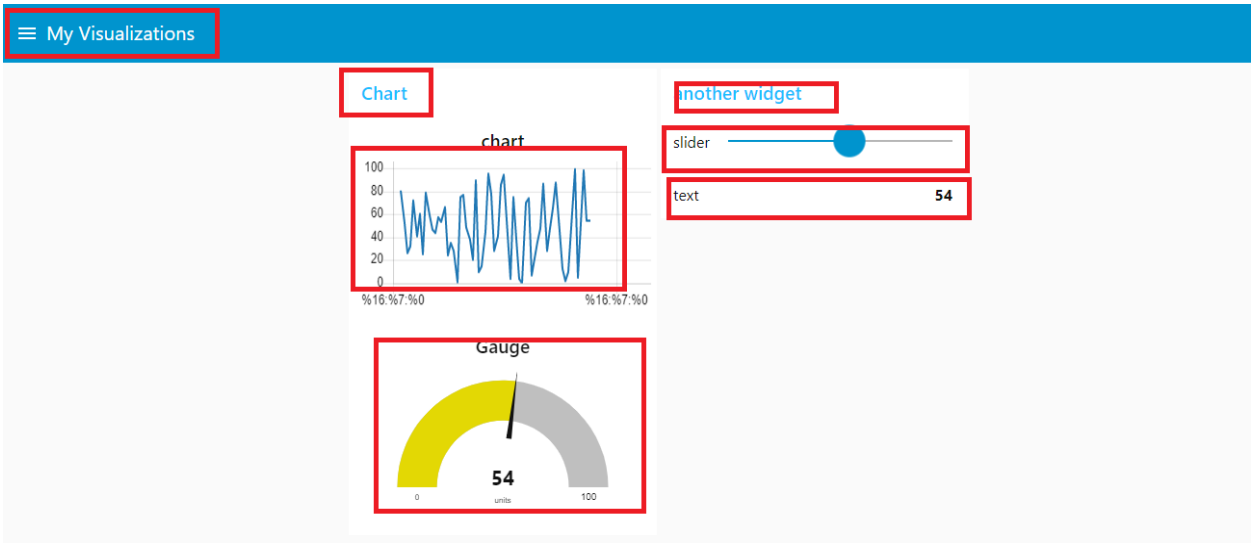


Add other UI Nodes:

As a last example, let's use a couple of the other UI nodes, a **slider** node and a **text** node to show the same data on a slider and as a text string.



For these two nodes, configure them to use the same tab – "My Visualizations " but edit group name "anotherWidget"(You will need to click "Add new UI_group" from the drop down menu of the Group field, and then click the edit button). You will also need to change the min and max value for the slider node to show the correct position of the slider. Deploy those and let's take a look at your dashboard. As you can see, we now have two widget groups, group "Visualizations" with a chart and a gauge, group "anotherWidget" with a text filed and a slider.


My Visualizations
Chart
chart
100
80
60
40
20
0
%16:%7:%0
%16:%7:%0
Gauge
54
0
units
100
another widget
slider
text
54