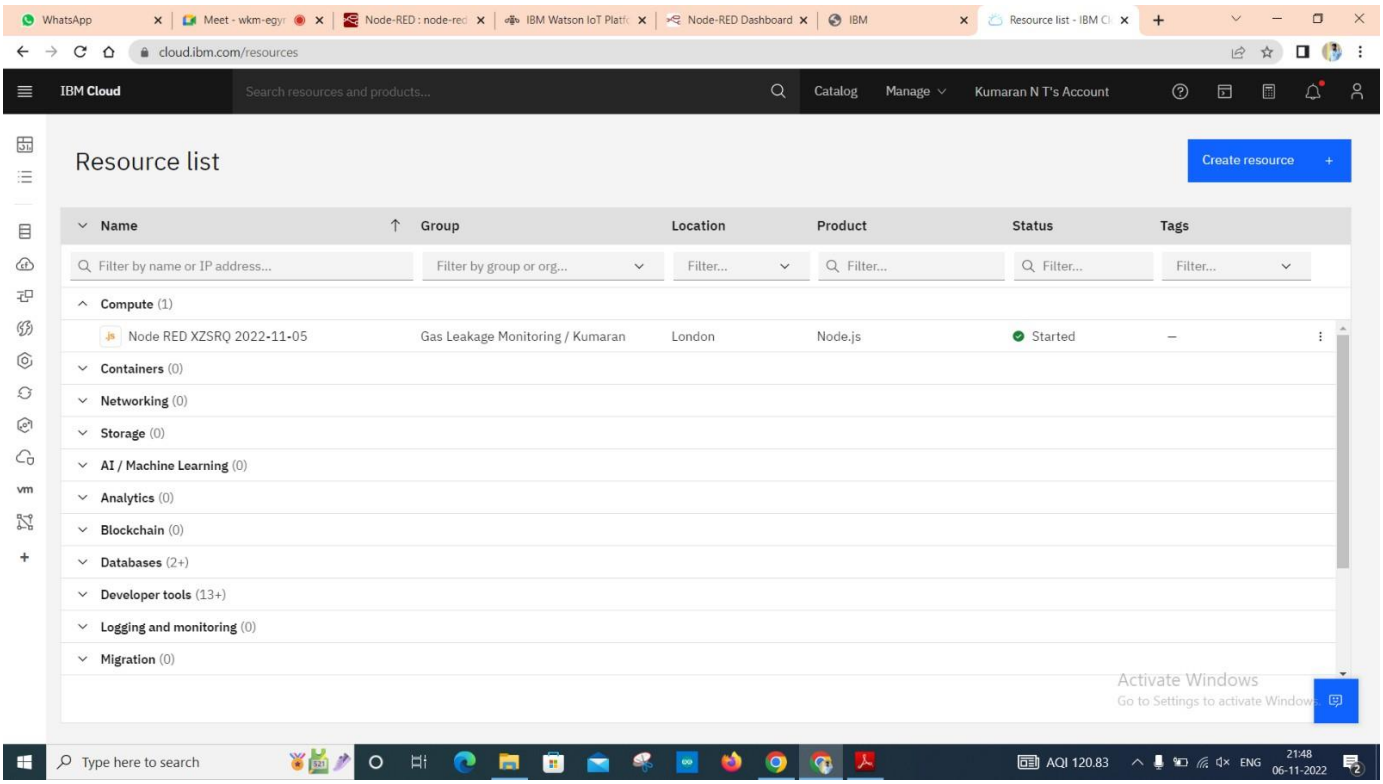
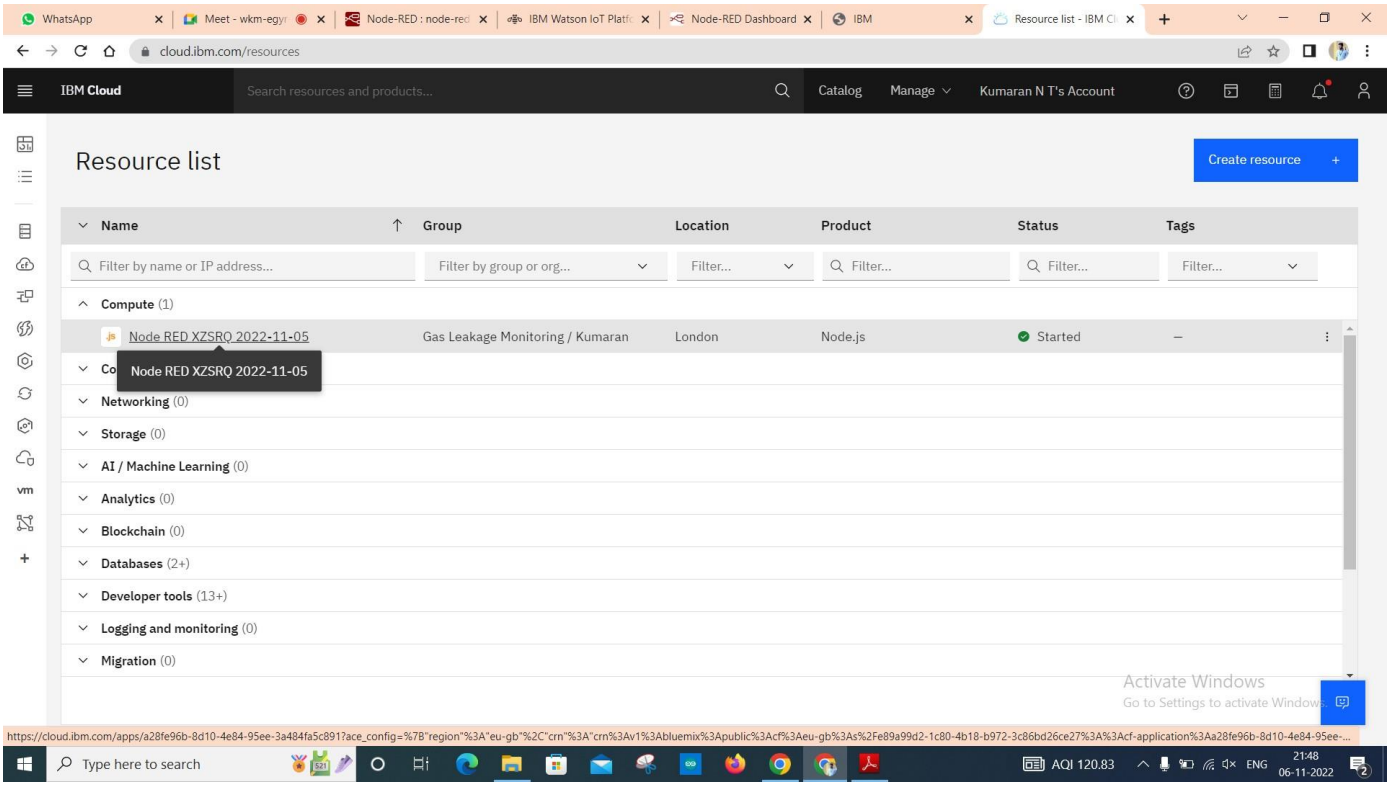
Creating a Node-Red Web Application to view data in Separate Numerical form

Date	07 November 2022
Team ID	PNT2022TMID04619
Project Name	Project - Gas Leakage Monitoring and Alerting System for Industries.

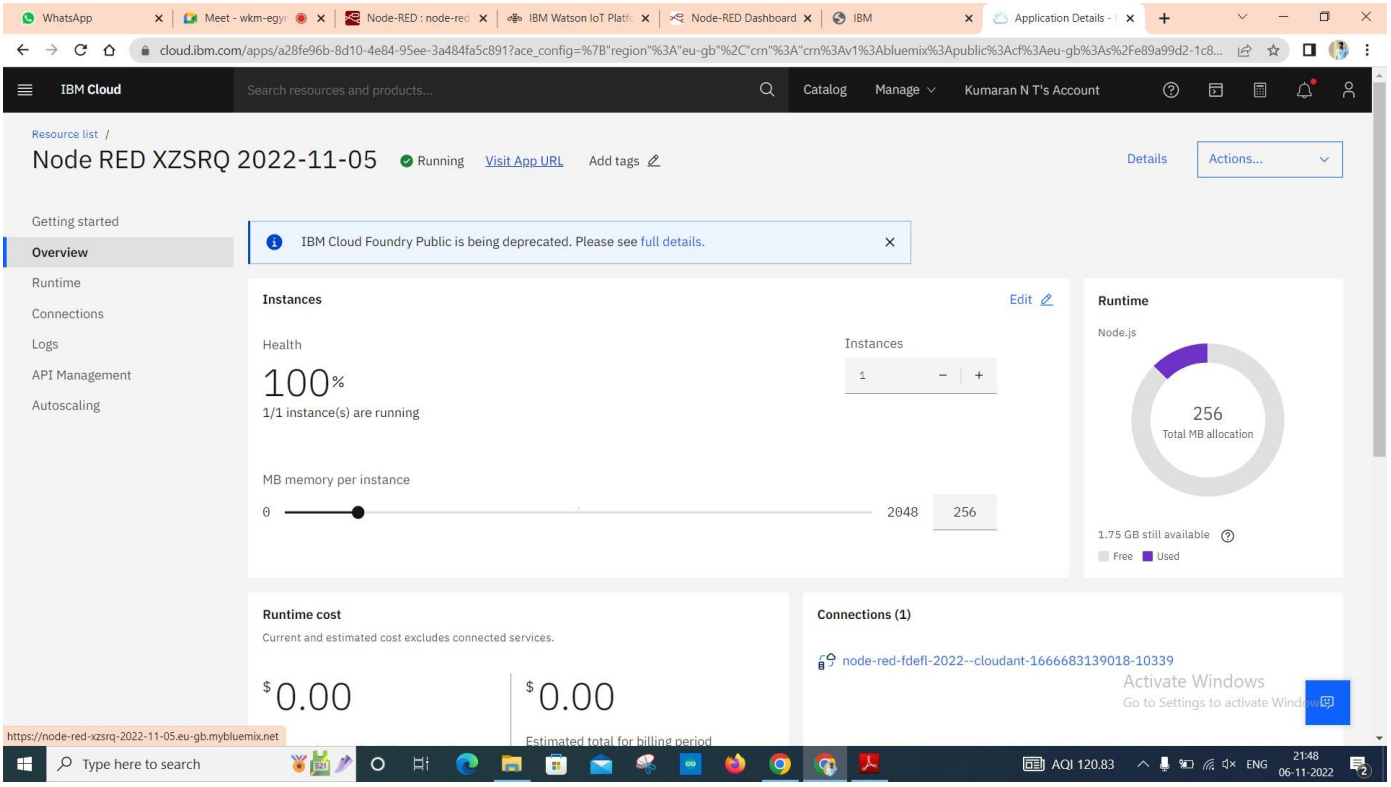
- In IBM cloud dashboard, click on Cloud Foundry apps



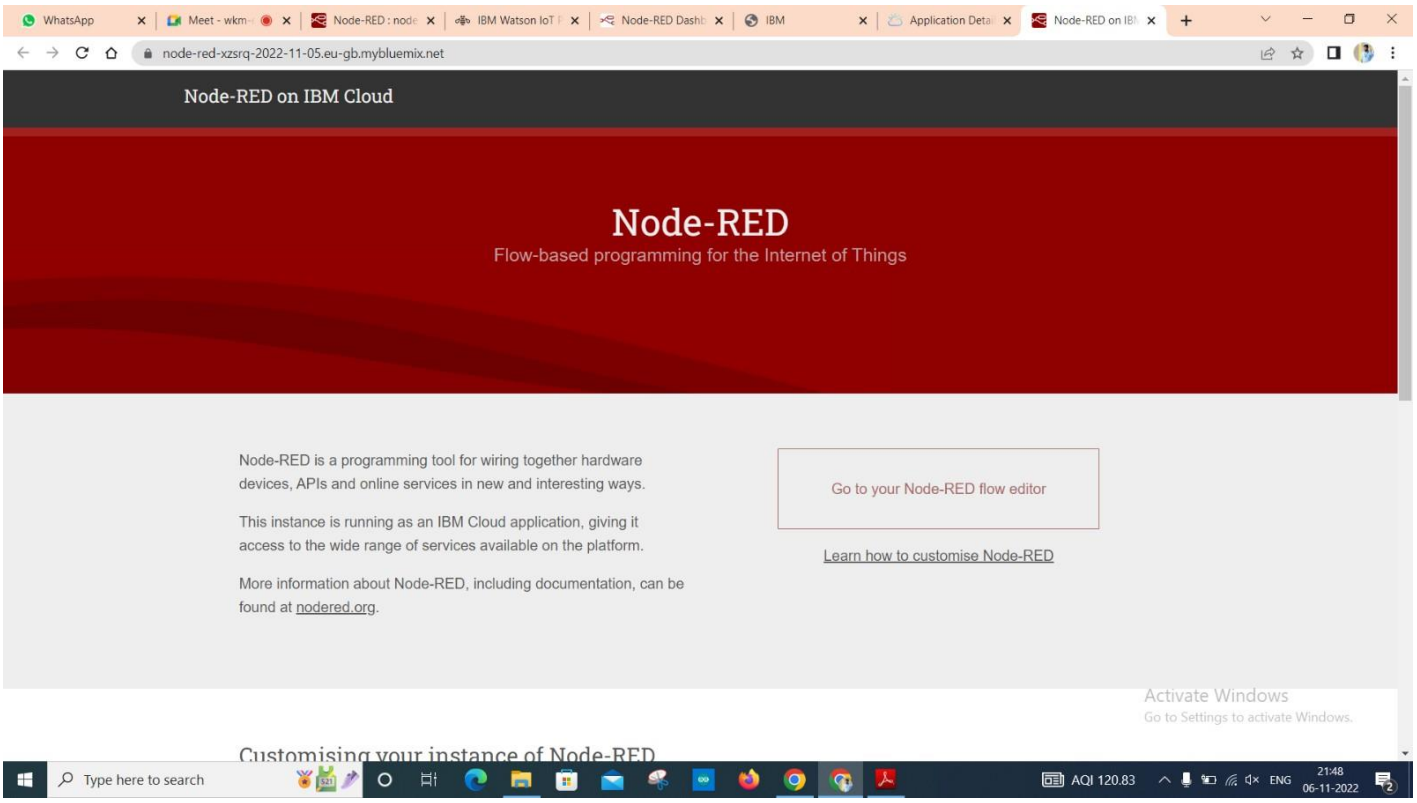
➢ A new window appears where we need to NODE-RED SELDZ app created before.

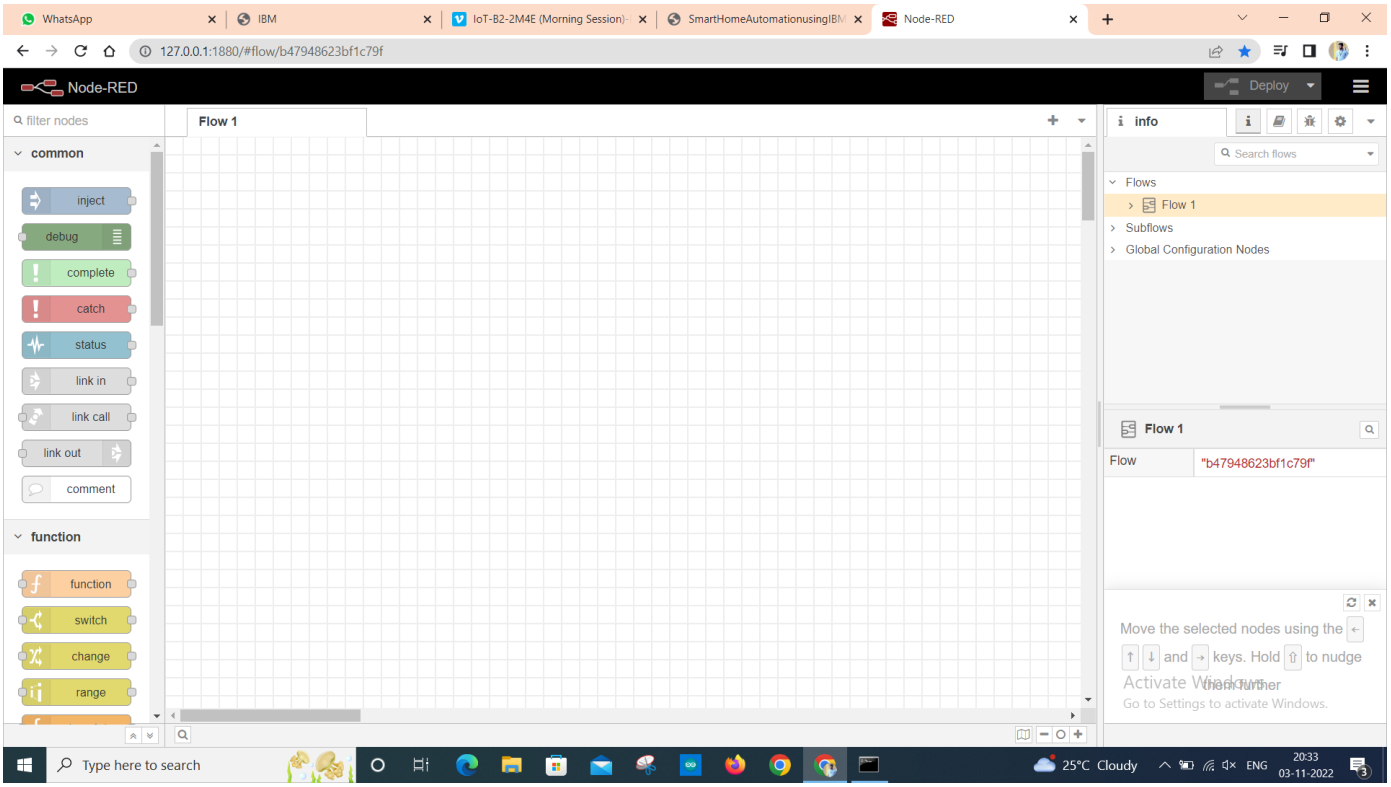


➢ Click on Visit App URL in Node RED SELDZ service dashboard.

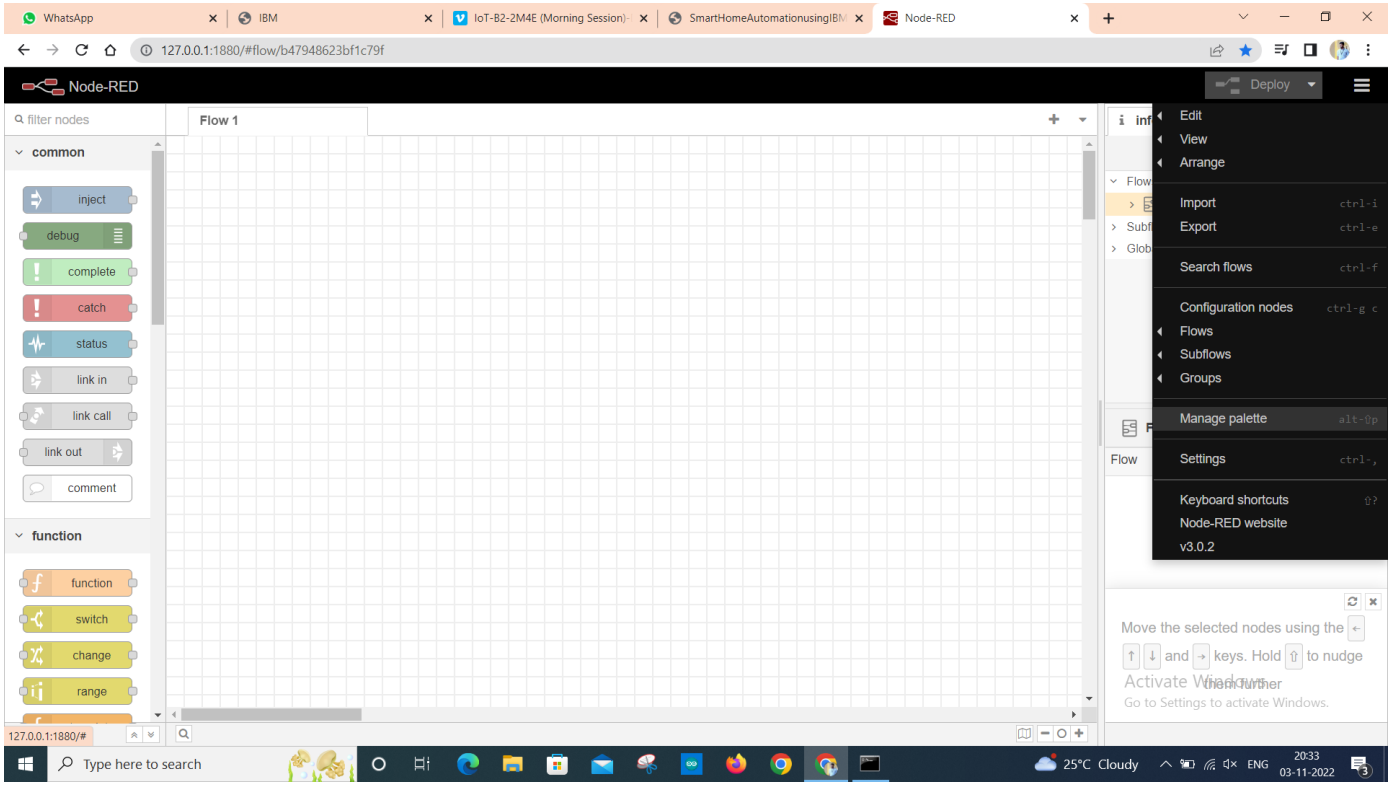


- Click on your Node-RED flow editor where you will be redirected to the Node-RED flow editor.

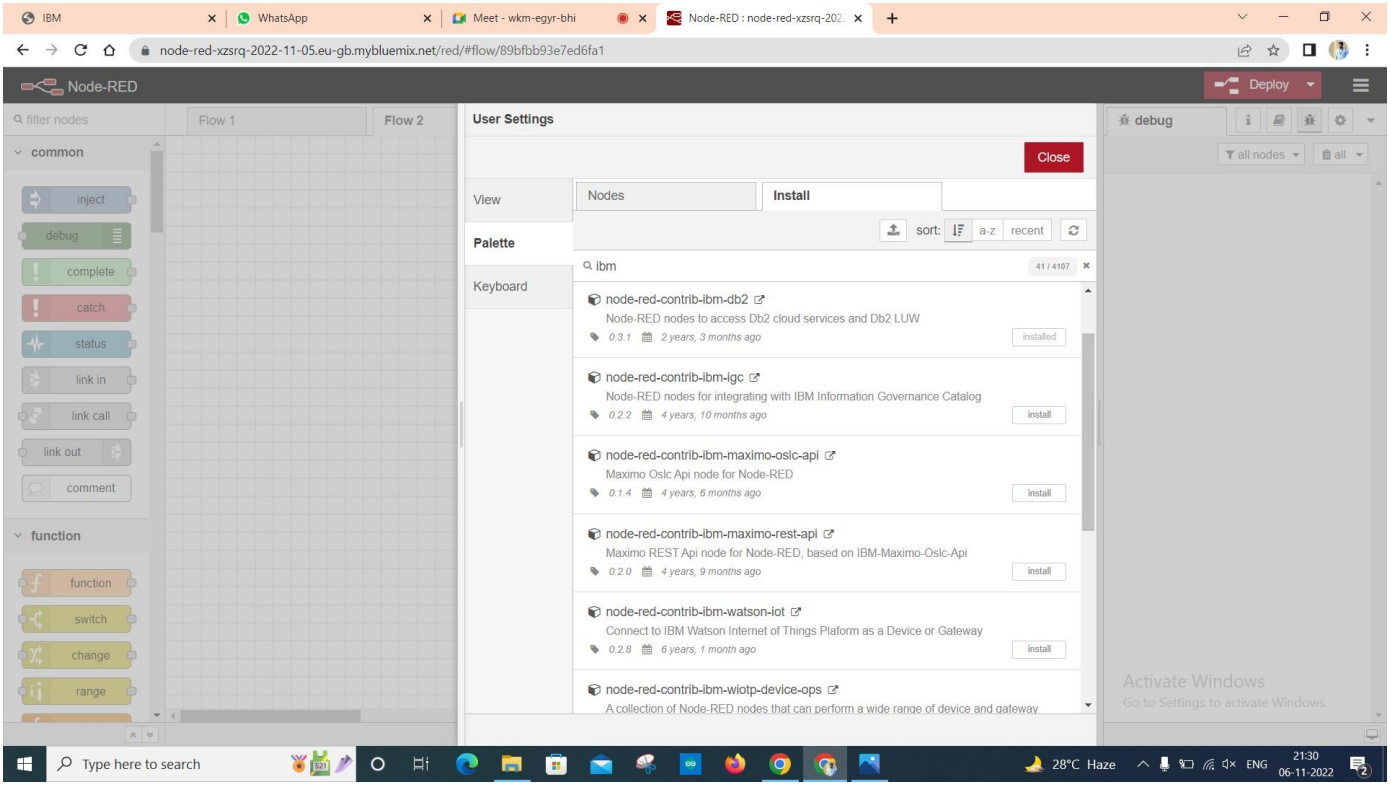




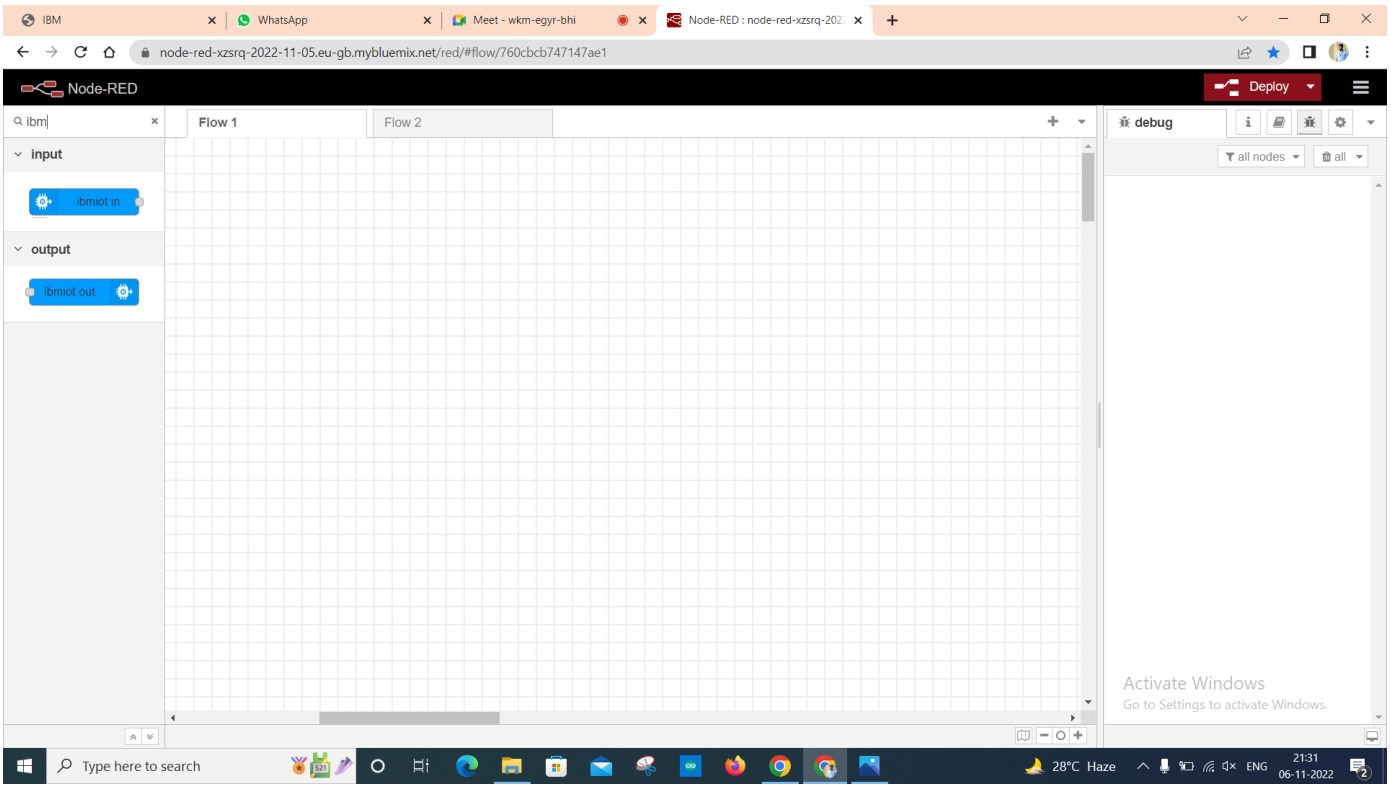
- To install IBM nodes in Node-red flow editor click on manage palette in the menu option which is on the top-right of the screen.



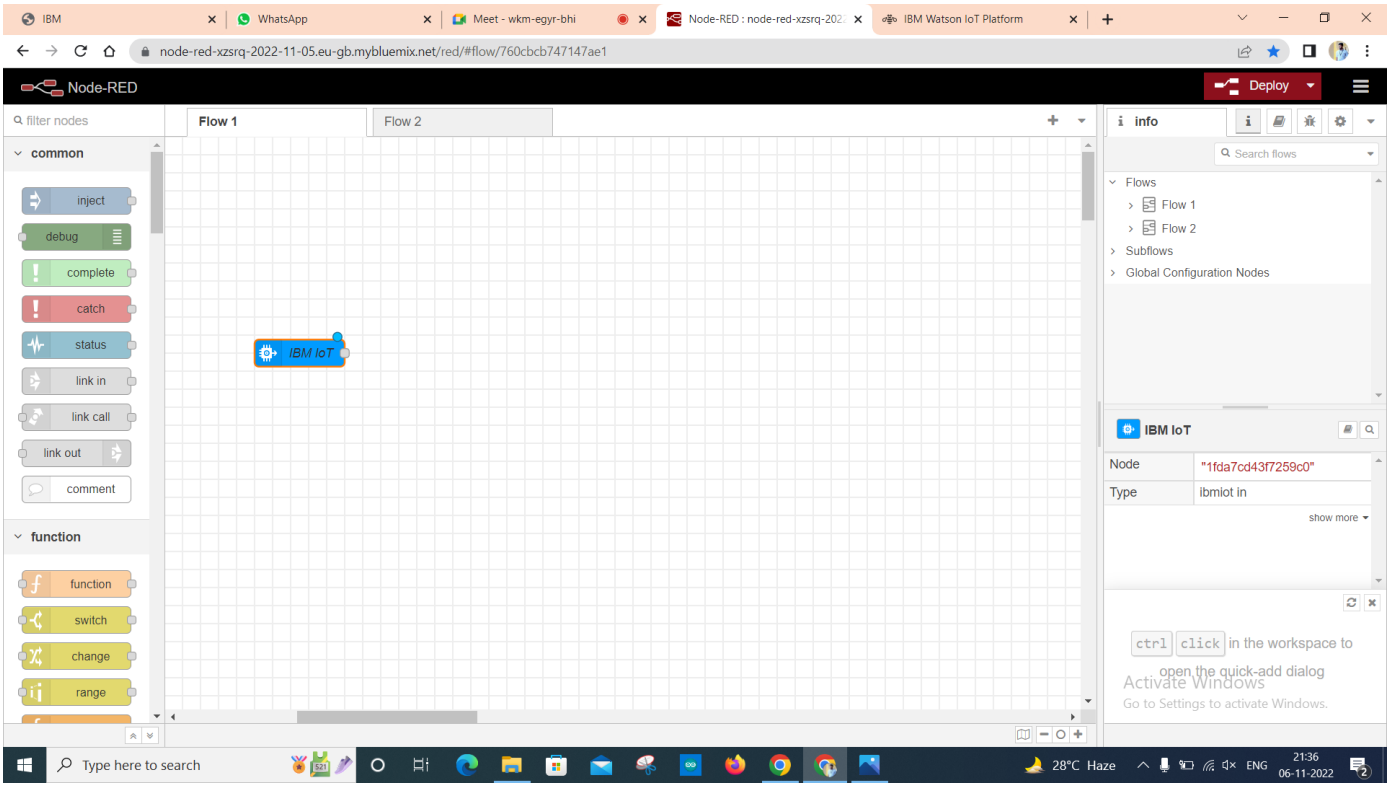
- In install section search for ibmiot and install the ibm nodes to flow editor.



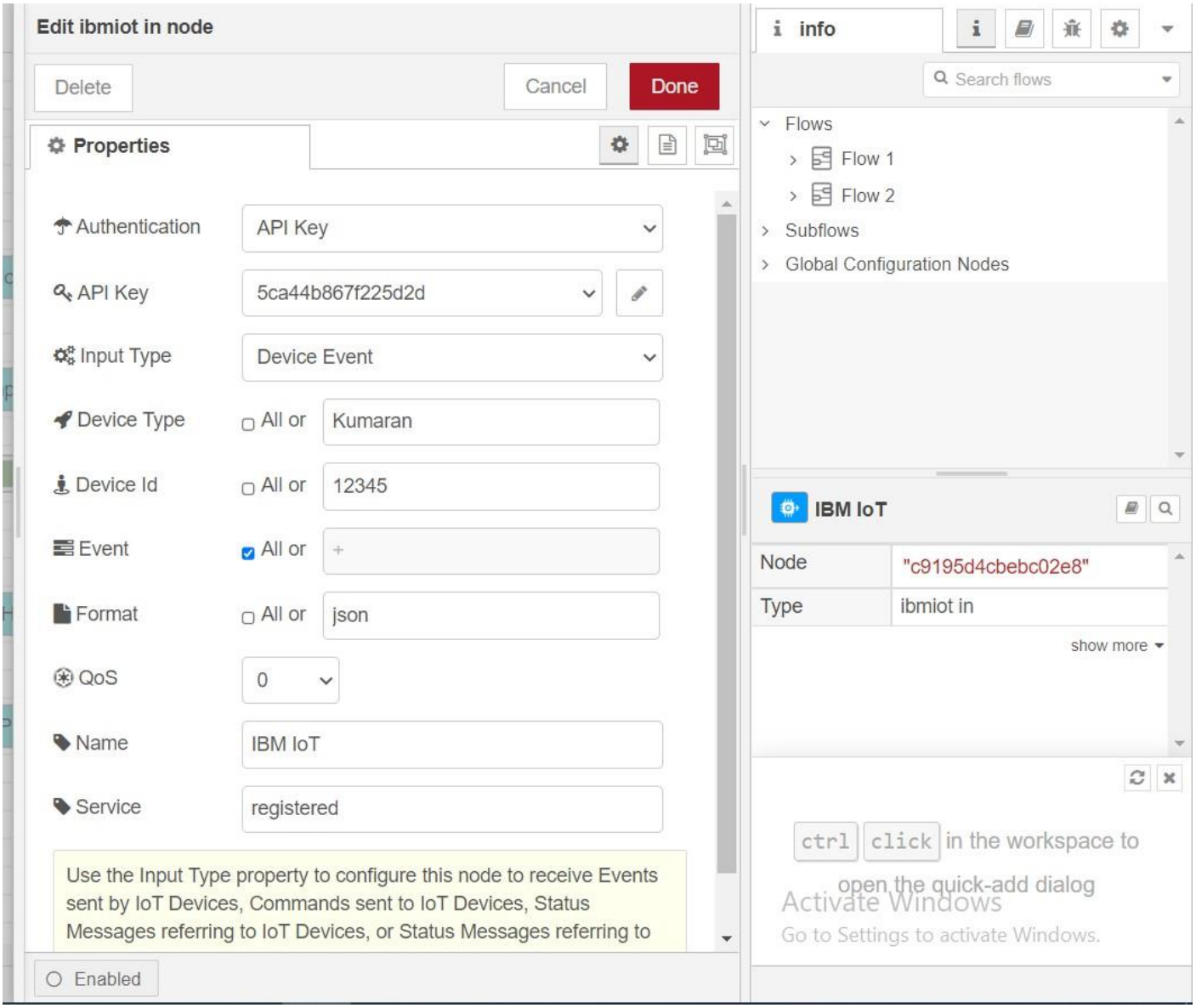
- Search for IBM nodes in the filter nodes section



- To Retrieve the data from the IBM IoT platform by using Node-RED IBM IoT Input node and double click on the IBM IoT input node

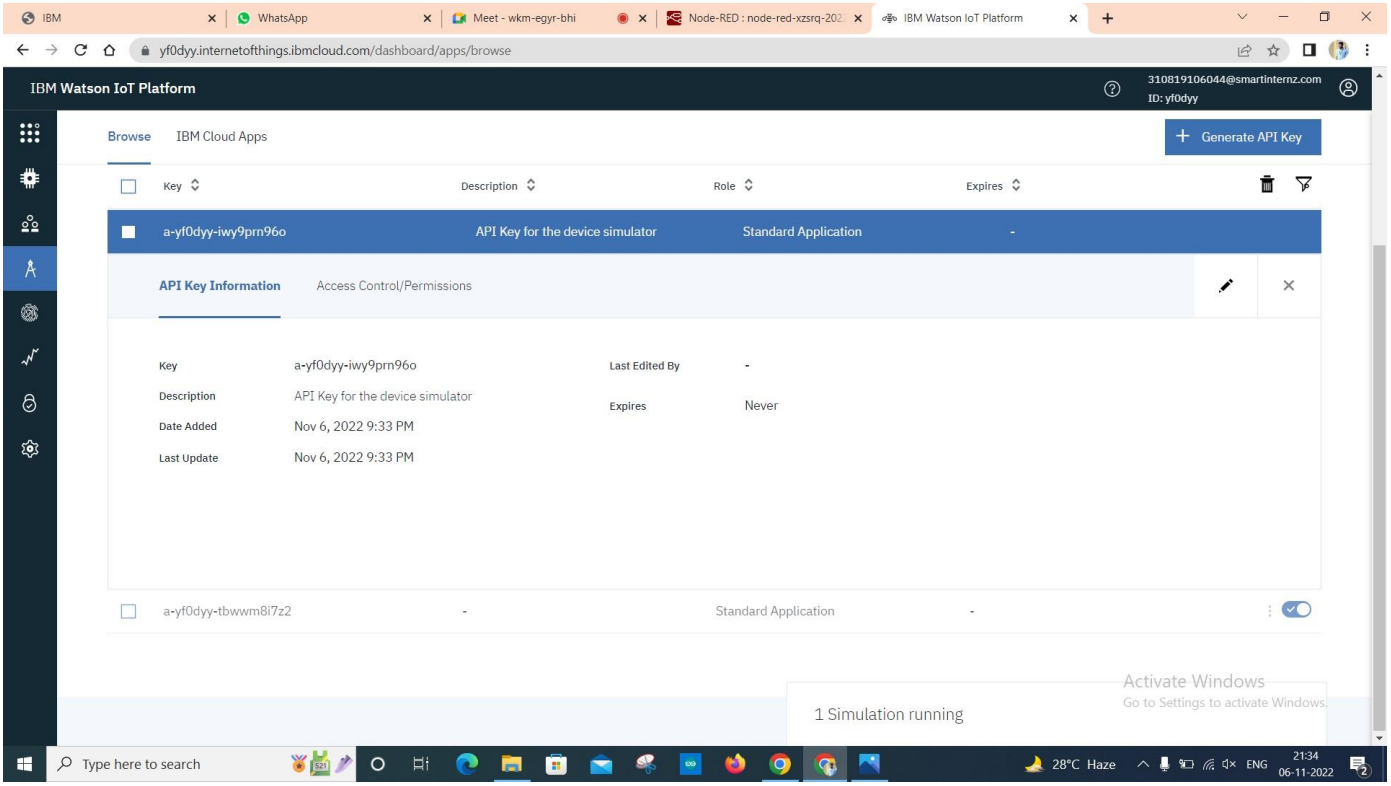


- Select API Key from Authentication in properties.
- In API Key paste API Key, API Token and server name and update it

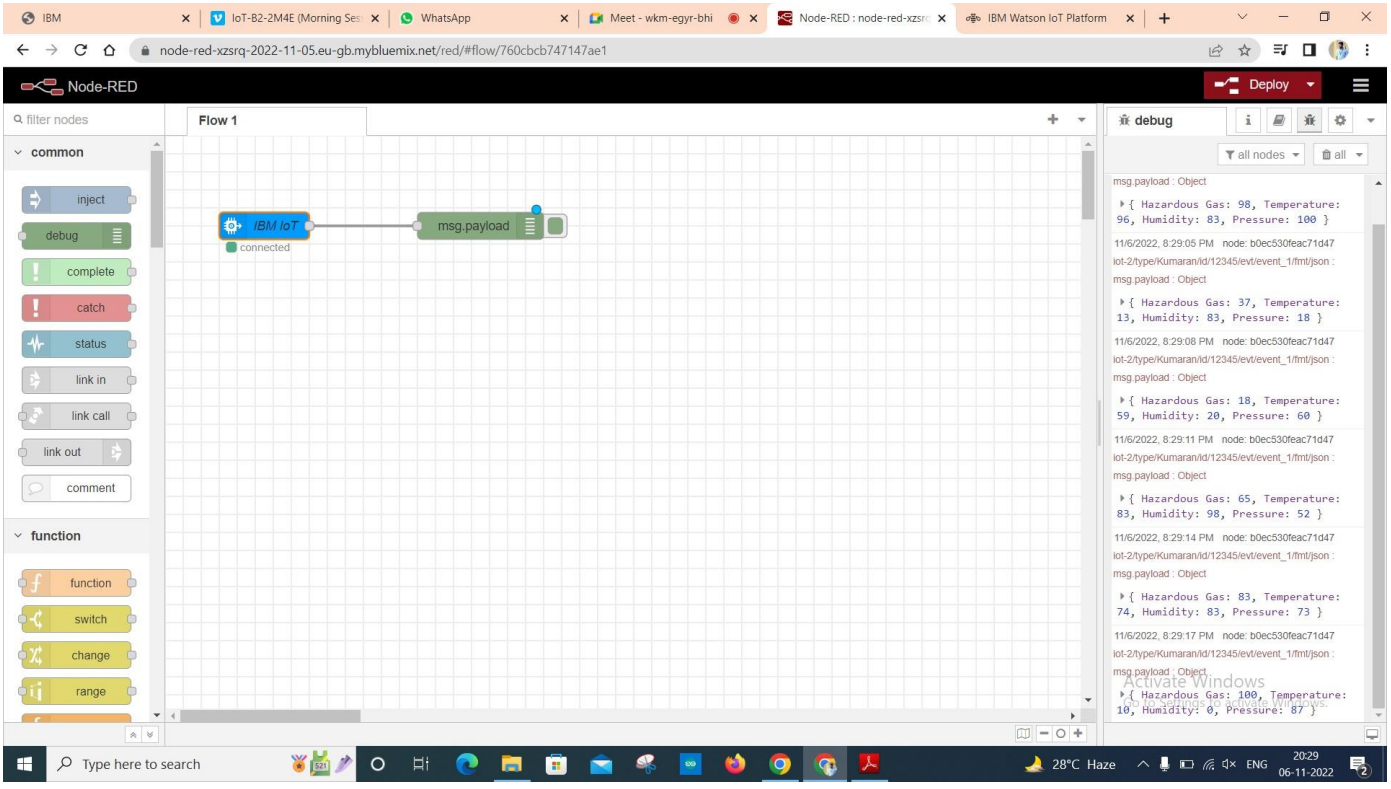


- Also update your input type as event, Device type, Device ID, command and format in the propertiees section and click on Done

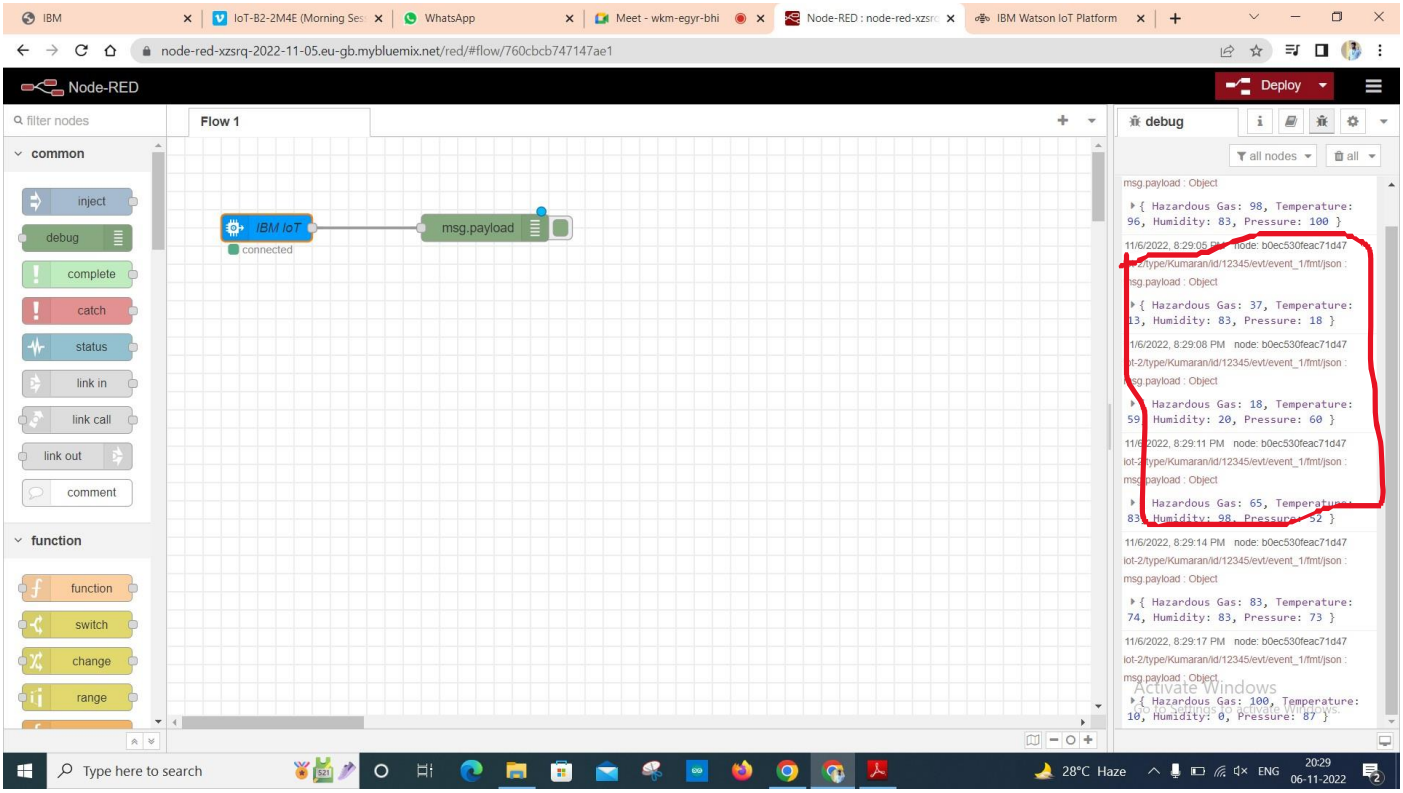
- **To generate API Key go to IBM IoT platform**
- In Apps Section -> Click onGenerate API Key



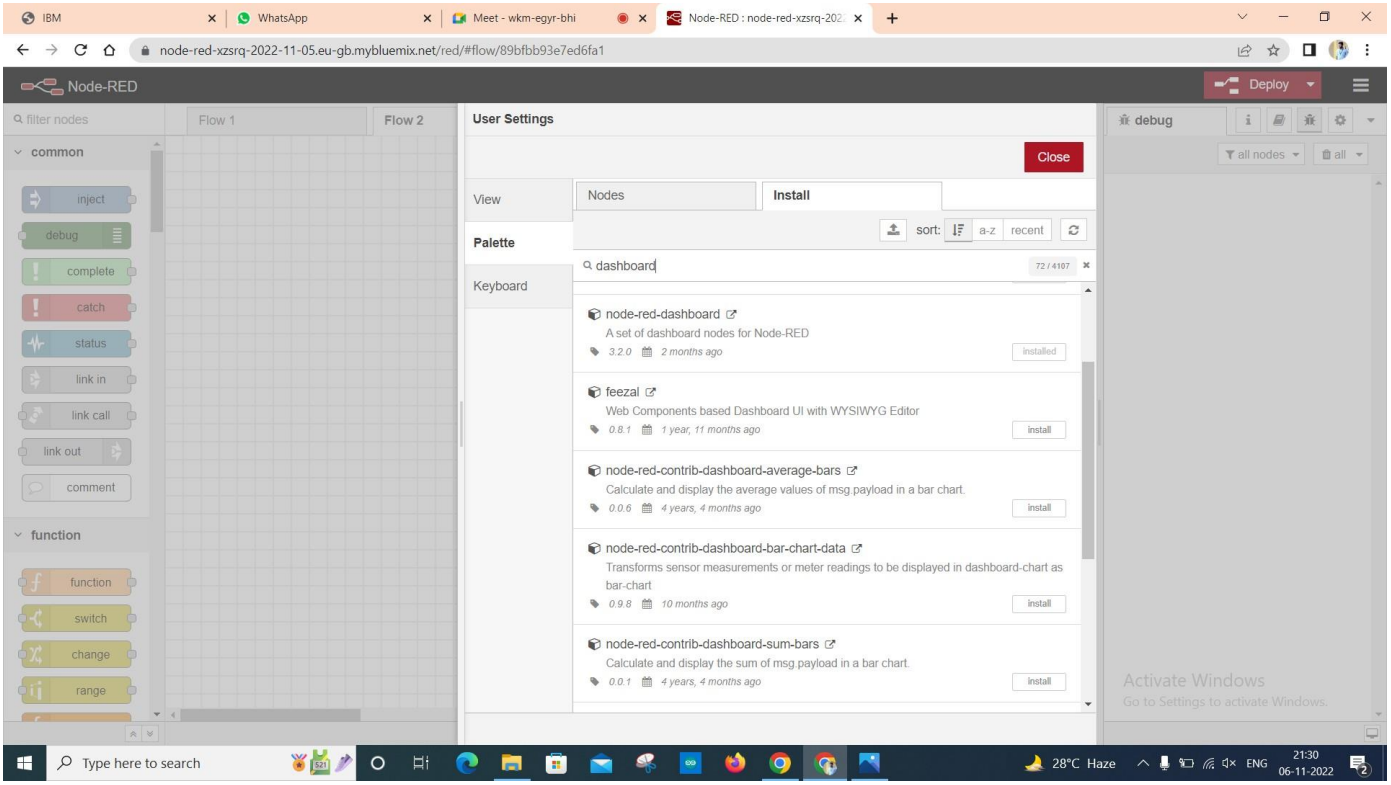
- Click on Deploy option to check the connection status. If the status is disconnected check for IBM IoT properties and try again.



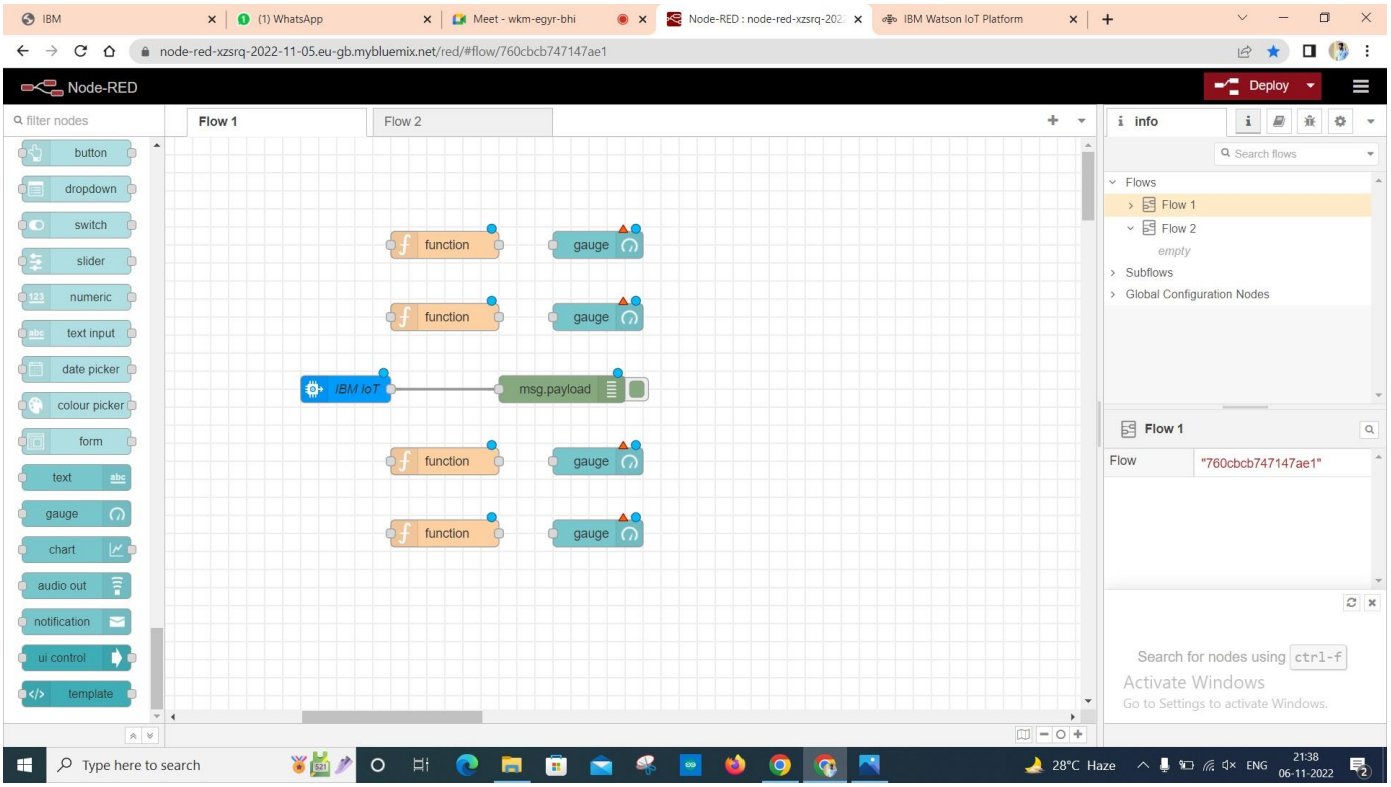
- Place the debug node in the flow editor and click on deploy to see the temperature and humidity value in the debug tab



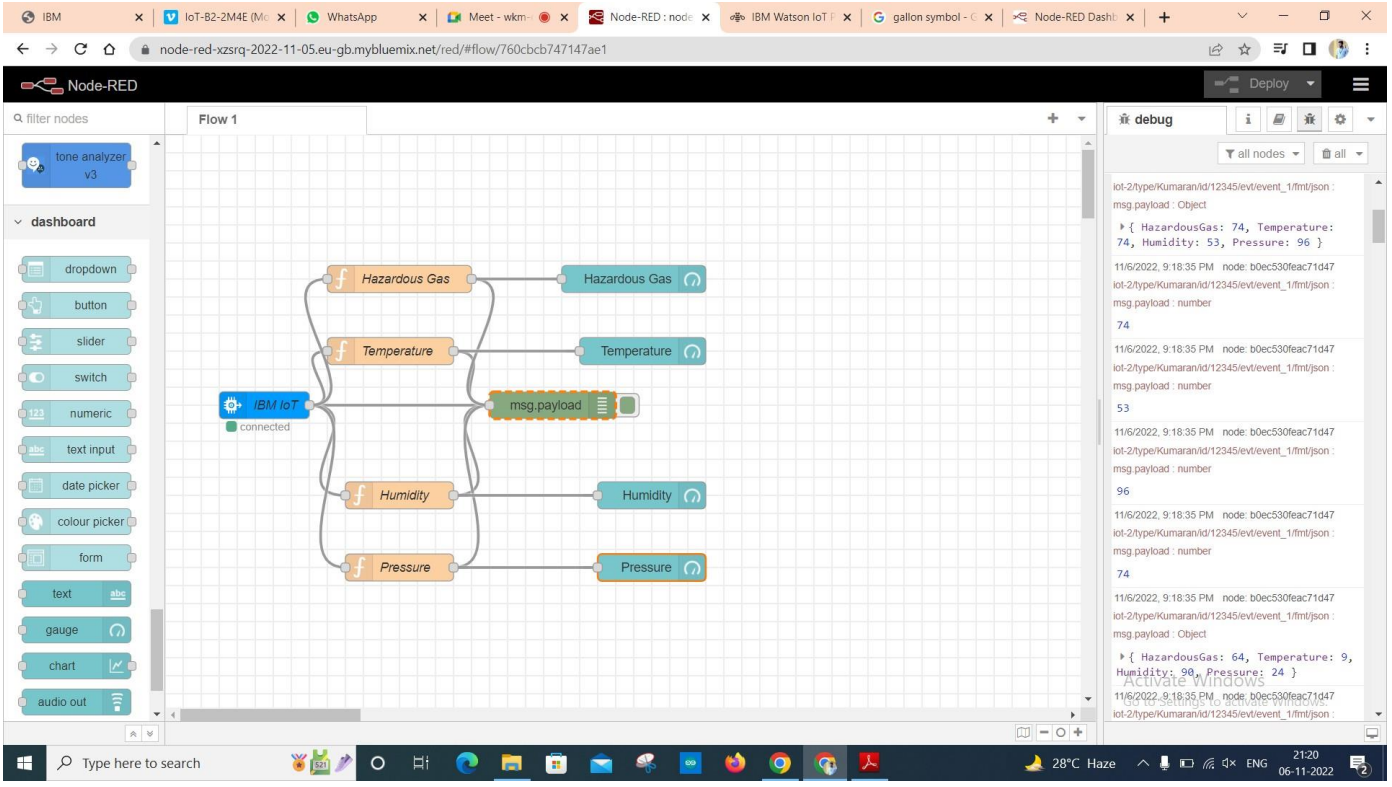
- Install the dashboard node from the manage pallet to create a UI to display temperature and humidity values in the Dashboard



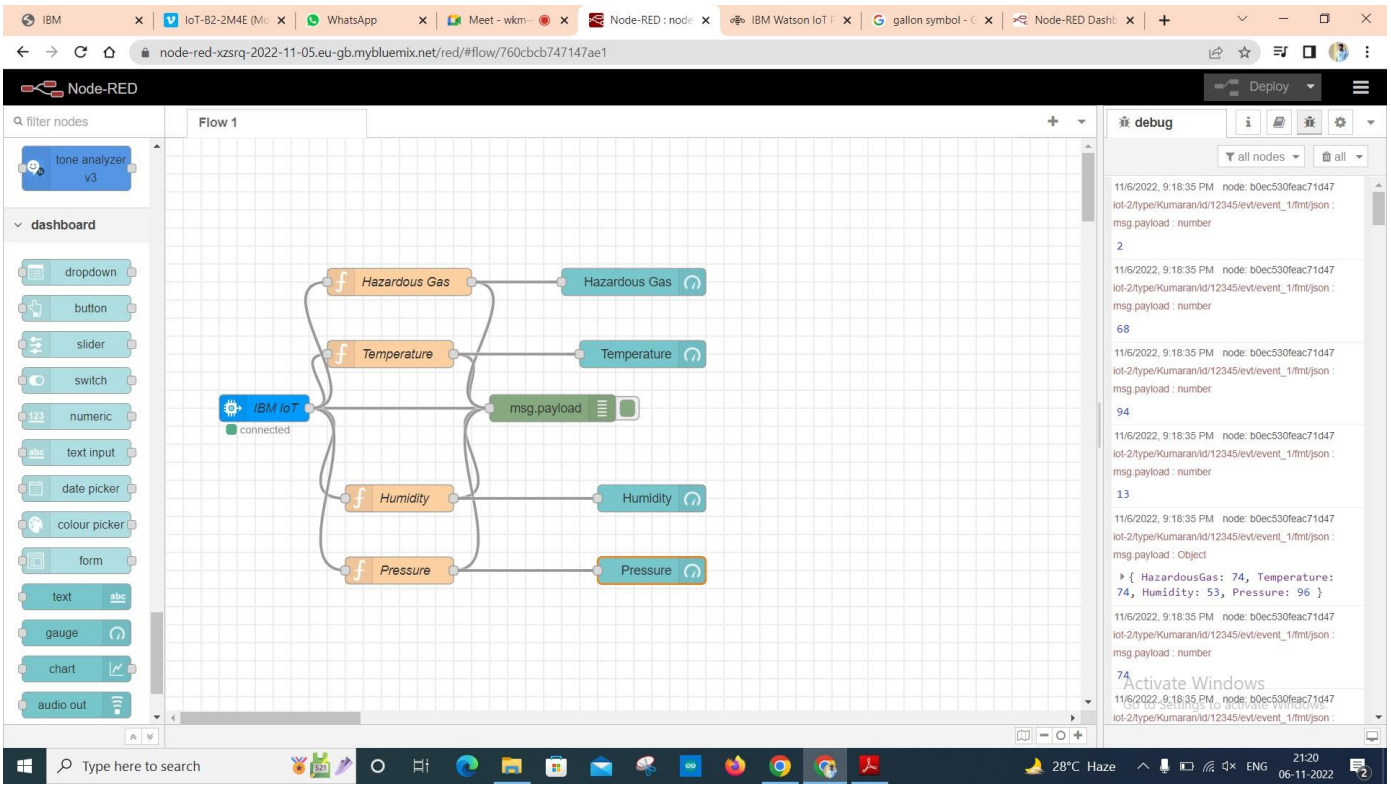
- Drag and place the function node ang gauge node in the flow editor to separate the temperature and humidity value



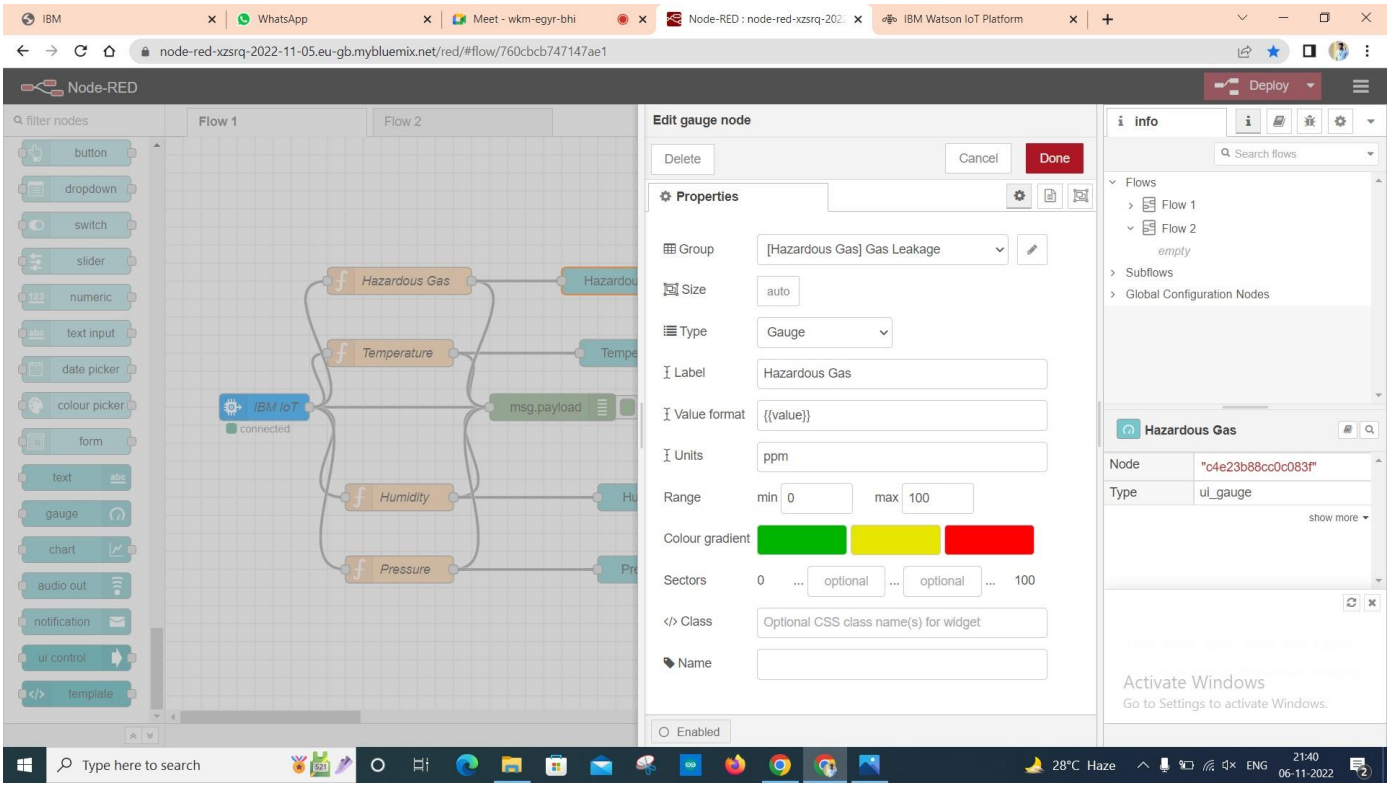
- Double click on function and update the details as follow,
- Type msg.payload=msg.payload.Temperature in one function.
- Type msg.payload=msg.payload.Humidity in another function
- Type msg.payload=msg.payload.HazardousGas
- Type msg.payload=msg.payload.d.Pressure
- To separate the humidity and temperature values from payload and click deploy



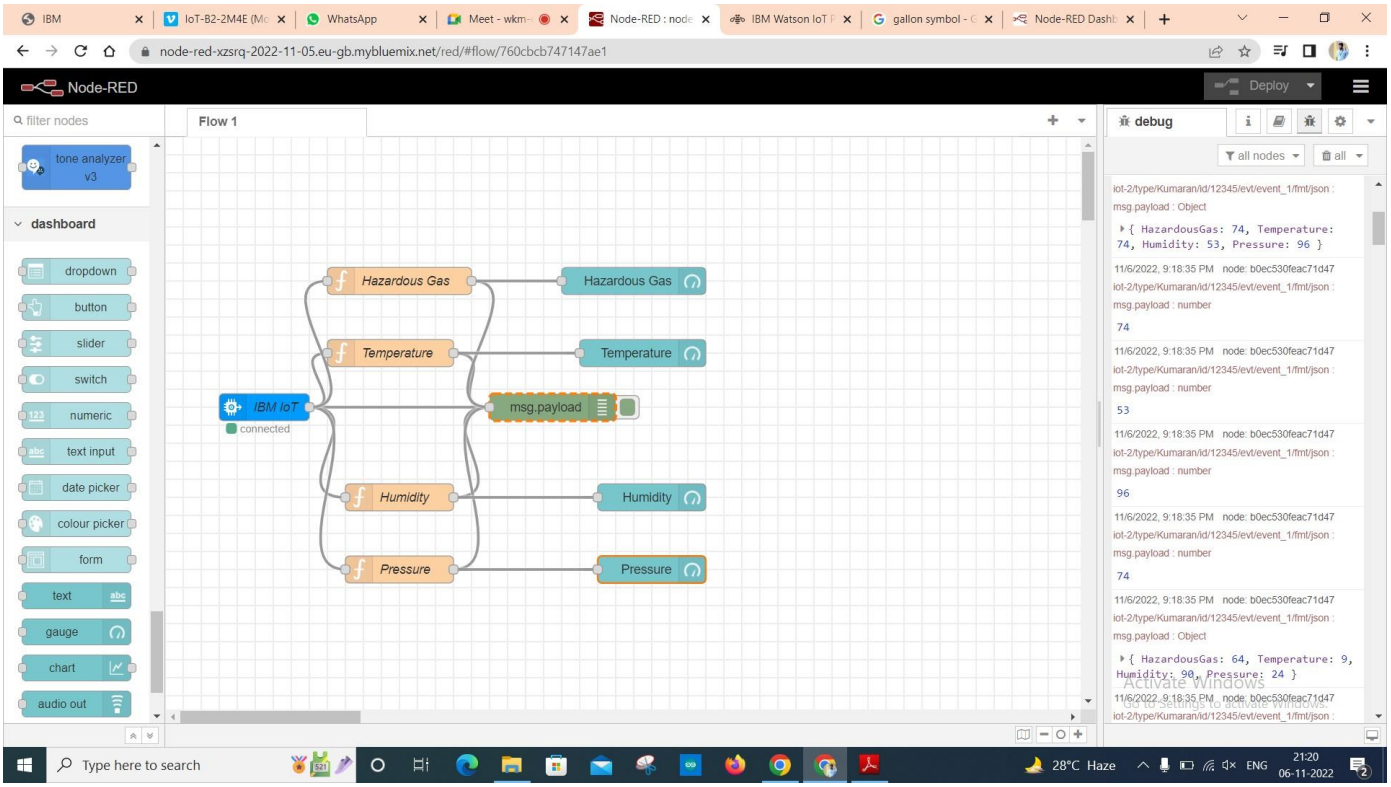
- Select gauge function and these nodes to temperature, pressure, hazardous gas and humidity



- Edit temperature, hazardous gas, pressure and humidity nodes and deploy it.



- After editing the nodes, deploy it



RESULT:

Thus, the Node-Red Web Application is created successfully.