

ASSIGNMENT 3

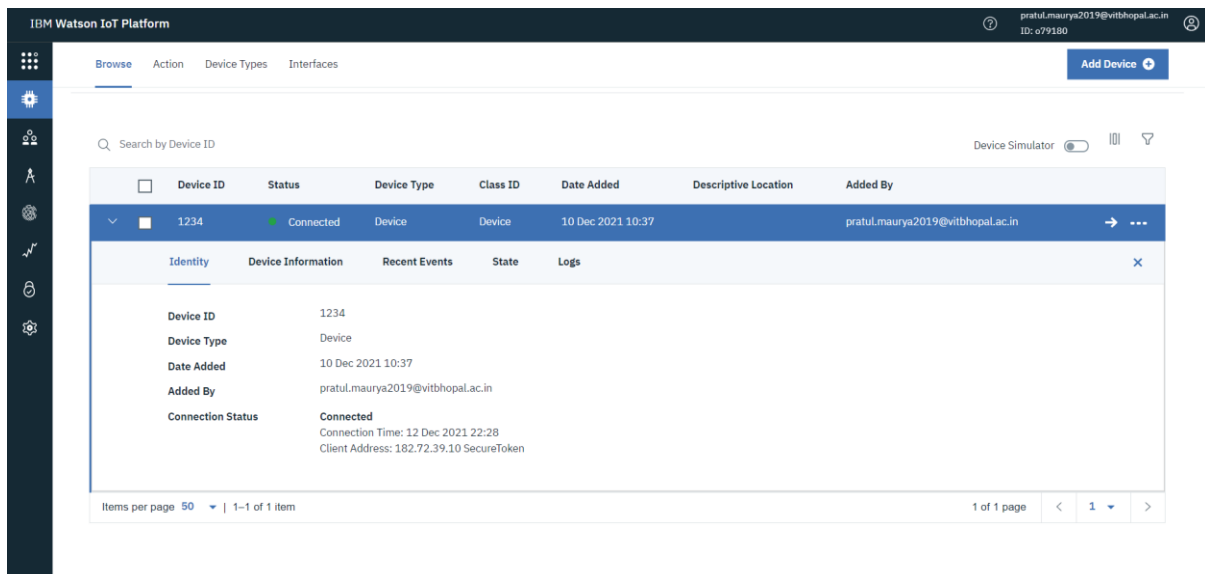
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Question - Develop a code to upload the water tank level and light intensity values to the IBM IoT platform and visualize them in the web application.

Solution: -

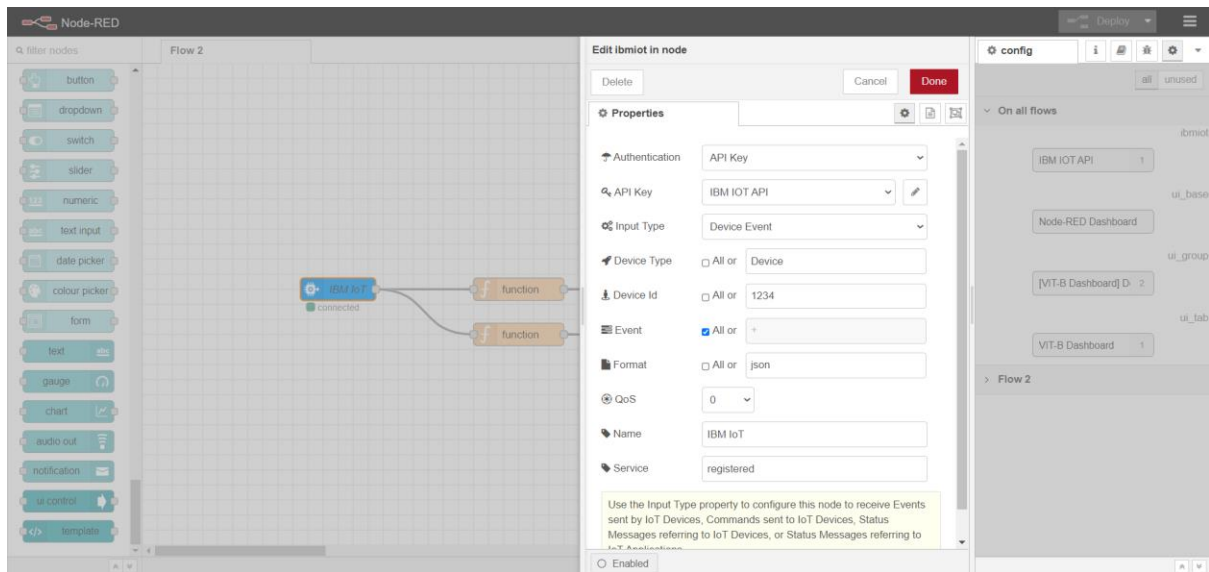
Step 1- From Watson IOT platform in IBM cloud open a new simulation on a device.



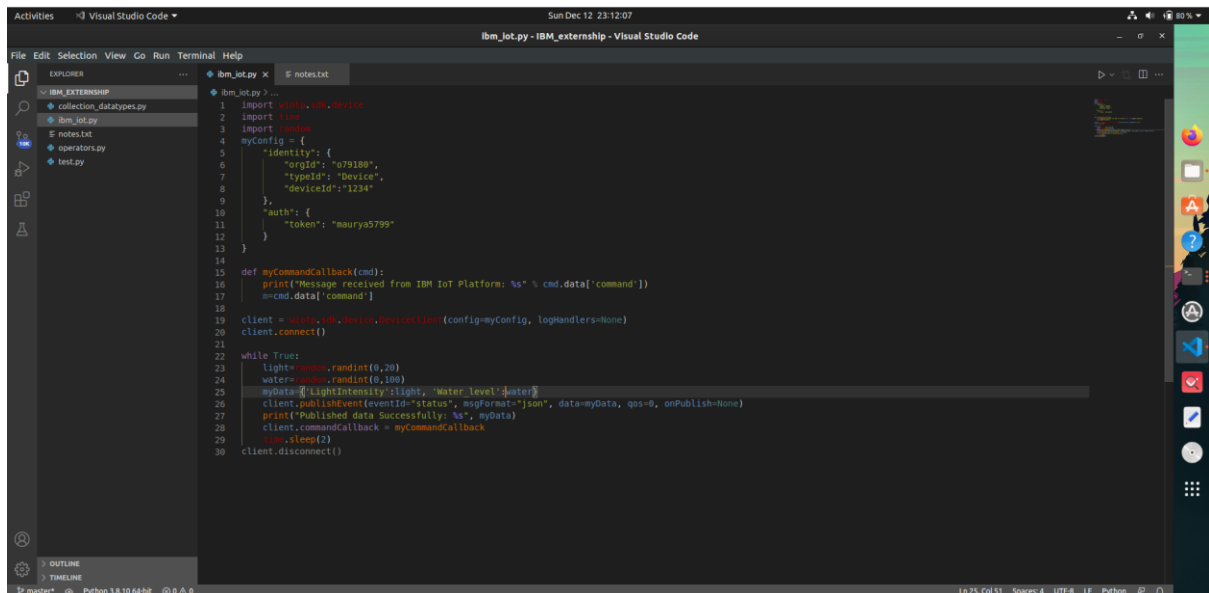
The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar is present with the text 'Search by Device ID'. A table lists devices, with one device (ID: 1234) highlighted. The device details panel shows the following information:

Identity	Device Information	Recent Events	State	Logs
Device ID	1234			
Device Type	Device			
Date Added	10 Dec 2021 10:37			
Added By	pratul.maurya2019@vitbhopal.ac.in			
Connection Status	Connected			
	Connection Time: 12 Dec 2021 22:28			
	Client Address: 182.72.39.10 SecureToken			

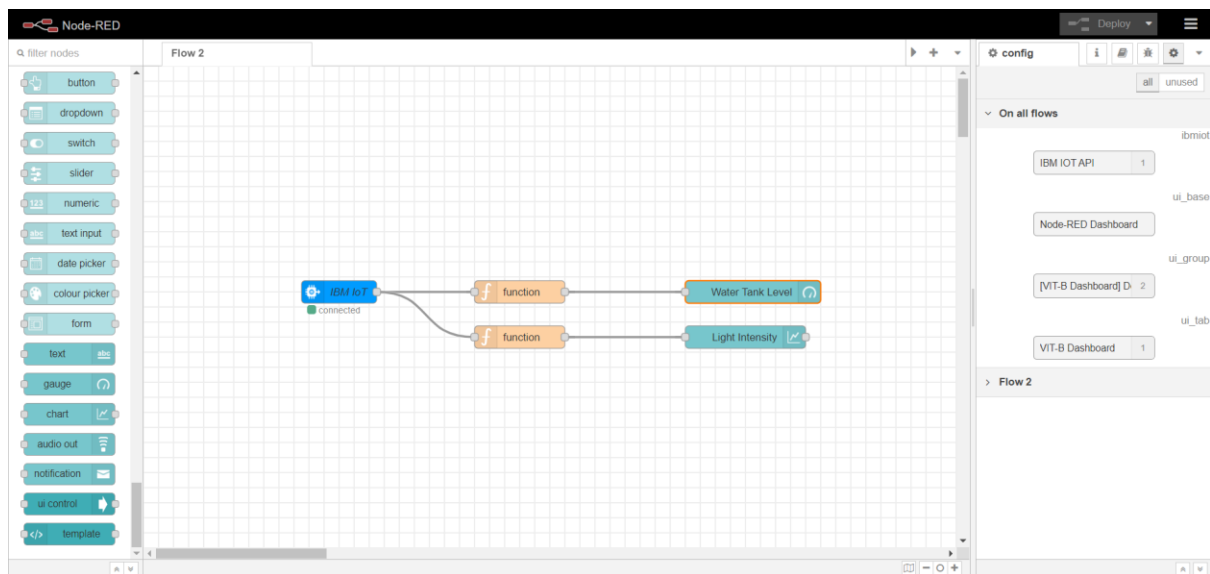
Step 2- Open IBM Cloud platform and launch the NODE-RED app. Add an input pallet then configure its details with the API key and device data generated on the Watson IoT platform.



Step 3- Edit the python program with your device details along with the Auth Token. Execute the program to send data to the IBM Watson platform. This data is then sent to the Node-Red service.



Step 4- Now add the function and dashboard pallets to the flow. Configure them with correct device id and details.



Step 5- Add the UI elements such as the chart, gauge, etc to visualize the data. Open the dashboard In NODE-RED and open the URL.

