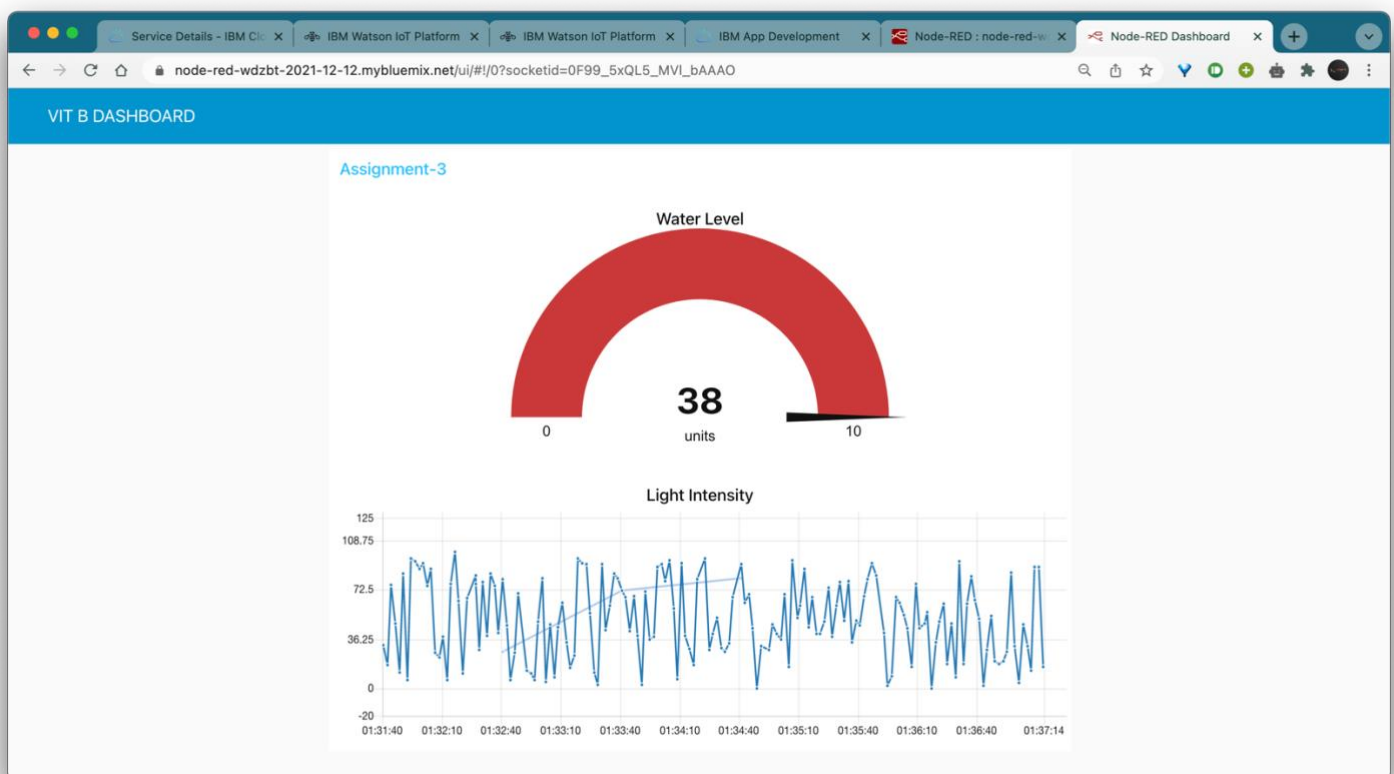


Assignment – 3

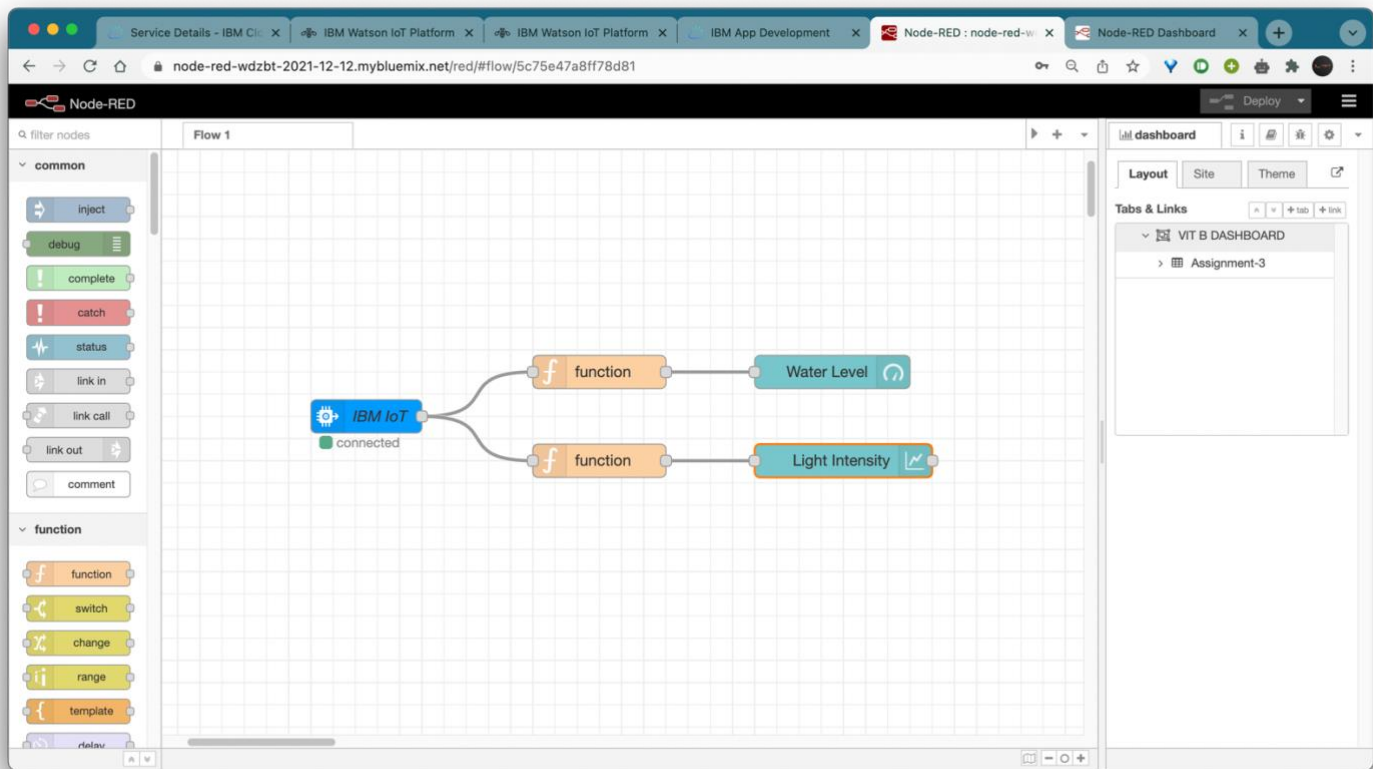
Name : V Surya Kumar
Reg. No. : 19BCE10286
Application ID : SPS_APL_20210013738

Q. 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.

Output Diagram:



Node-Red Diagram:



Device Events:

The screenshot shows the IBM Watson IoT Platform dashboard. The 'Browse' tab is selected, and the 'Recent Events' sub-tab is active for device ID 12345. The device is currently 'Disconnected'. The 'Recent Events' section displays a table of live data events.

Event	Value	Format	Last Received
status	{"temperature":97,"humidity":62}	json	a few seconds ago
status	{"temperature":39,"humidity":49}	json	a few seconds ago
status	{"temperature":70,"humidity":34}	json	a few seconds ago
status	{"temperature":27,"humidity":0}	json	a few seconds ago
status	{"temperature":104,"humidity":56}	json	a few seconds ago

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1 Simulation running

Python Code:

```
import wiotp.sdk.device
import time
import random

myConfig = {
    "identity": {
        "orgId": "qb2r0a",
        "typeId": "device",
        "deviceId": "12345"
    },
    "auth": {
        "token": "wehdo6-tubhuq-gUxgih"
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    myData={'temperature':temp, 'humidity':hum}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```