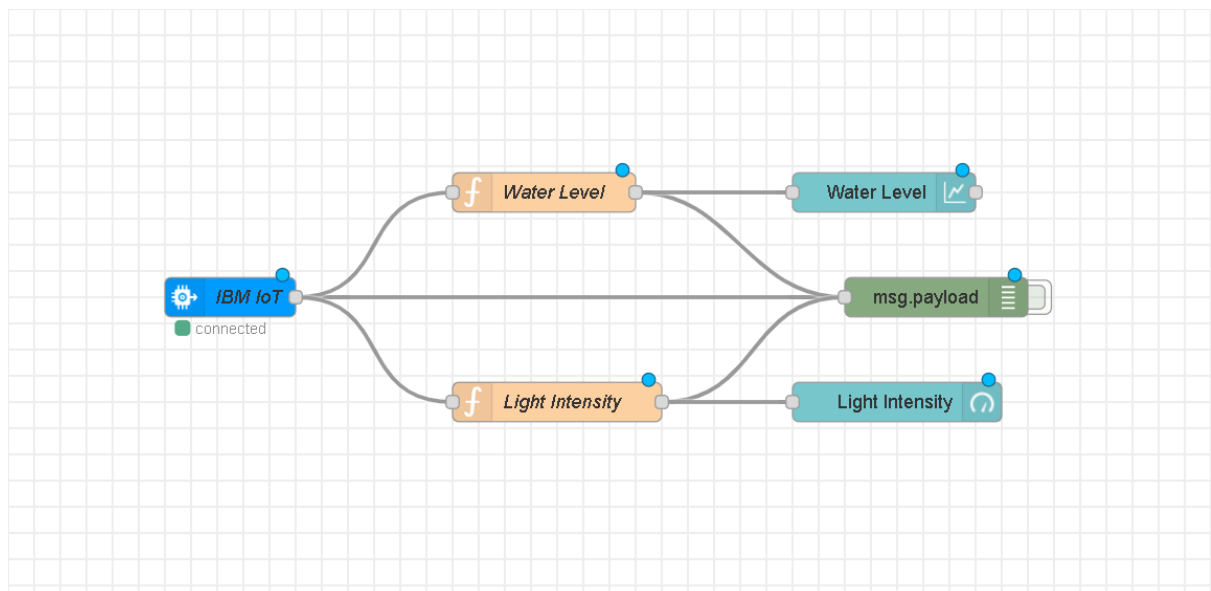Siddhant Shenoy

IoT Externship Training

Assignment 3

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.

NODE-RED FLOW –

CODE –

```python
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "lmw2gz",
        "typeId": "DevDelta",
        "deviceId":"9658"
    },
    "auth": {
        "token": "96582653"
    }
}

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:
    level=random.randint(0,1000)
    light=random.randint(0,100)
    myData={'Water Level':level, 'Humidity':light}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```

OUTPUTS –

a) Python Shell

```
            RESTART: C:\0sers\Shenzo\Downloads\waterlevel.py
2021-07-19 10:57:25,349  wiotp.sdk.device.client.DeviceClient  INFO  Conne
d successfully: d:3zj2w8:vitdevice:9658
Published data Successfully: &s ('Uaterlevel': 26, 'Lightintensity': 54}
Published data Successfully. 8s ('*aterlevel'. 877, 'Lightintensity'. 90)
Published data Successfully. 8s ('Waterlevel'. 716, 'Lightintensity'. 74)
Published data Successfully: &s ('*aterlevel': 859, 'Lightintensity': 85)
Published data Successfully: &s ('*aterlevel': 59B, 'Lightintensity': 85)
Published data Successfully. 8s ('*aterlevel'. 784, 'Lightintensity'. 81)
Published data Successfully: 8s ('Waterlevel': 666, 'Lightintensity': 72)
Published data Successfully: &s ('*aterlevel': 722, 'Lightintensity': 67)
Published data Successfully: &s ('*aterlevel': 972, 'Lightintensity': 87)
Published data Successfully. 8s ('*aterlevel'. 239, 'Lightintensity'. 41)
Published data Successfully: 8s ('Waterlevel': 780, 'Lightintensity': 98)
Published data Successfully: &s ('Uaterlevel': 262, 'Lightintensity': 15)
Published data Successfully: %s ('*aterlevel':    'Lightintensity': 20)
Published data Successfully. 8s ('*aterlevel'. 974, 'Lightintensity'. 67)
Published data Successfully: 8s ('Waterlevel': 270, 'Lightintensity': 8}
Published data Successfully: &s ('Uaterlevel': 24, 'Lightintensity': 86}
Published data Successfully. 8s ('*aterlevel'. 73, 'Lightintensity'. 42}
Published data Successfully. 8s ('Waterlevel'. 792, 'Lightintensity'. 45)
```

b) Water Level

c) Light Intensity

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