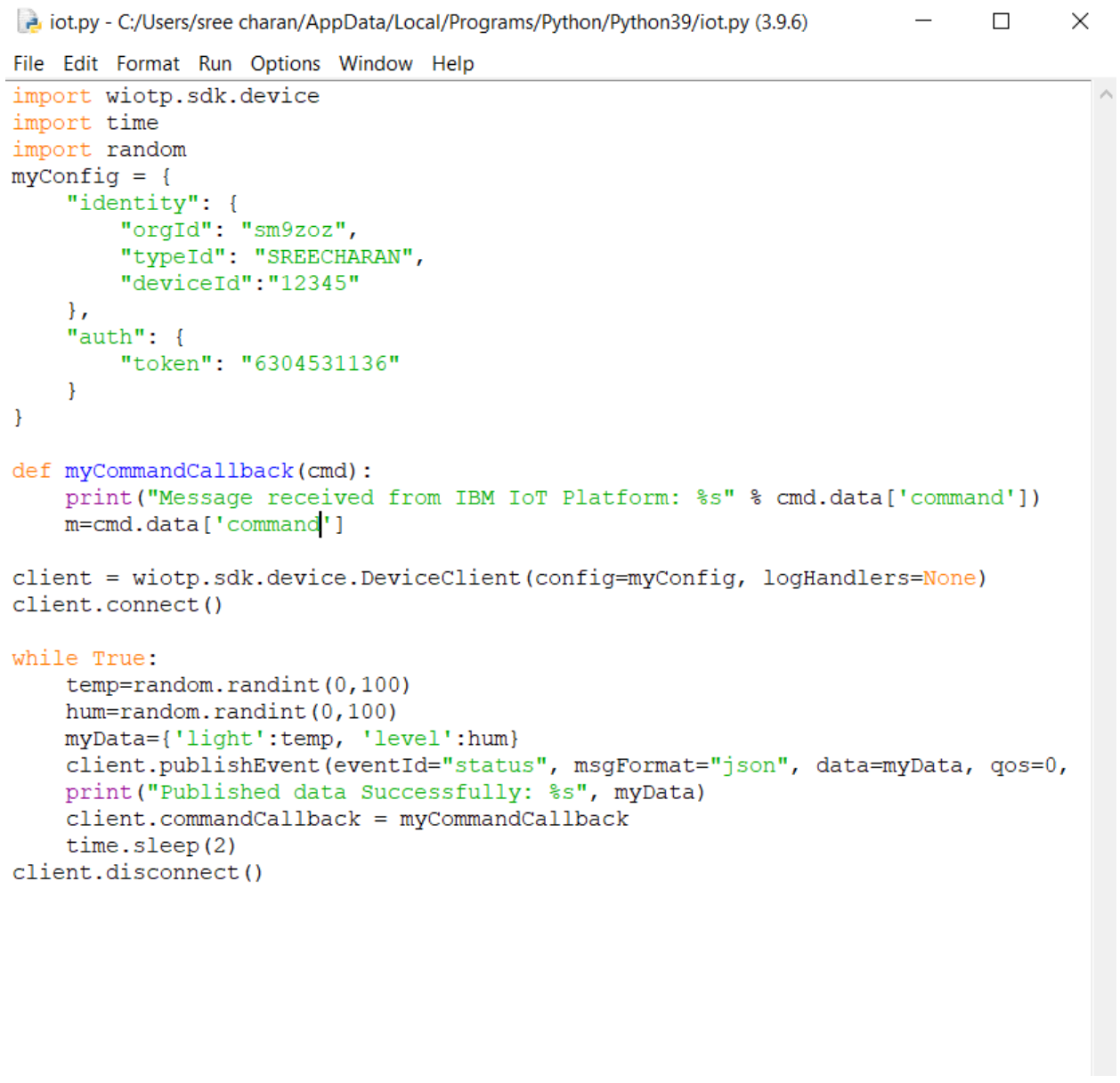
Assignment 3

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.

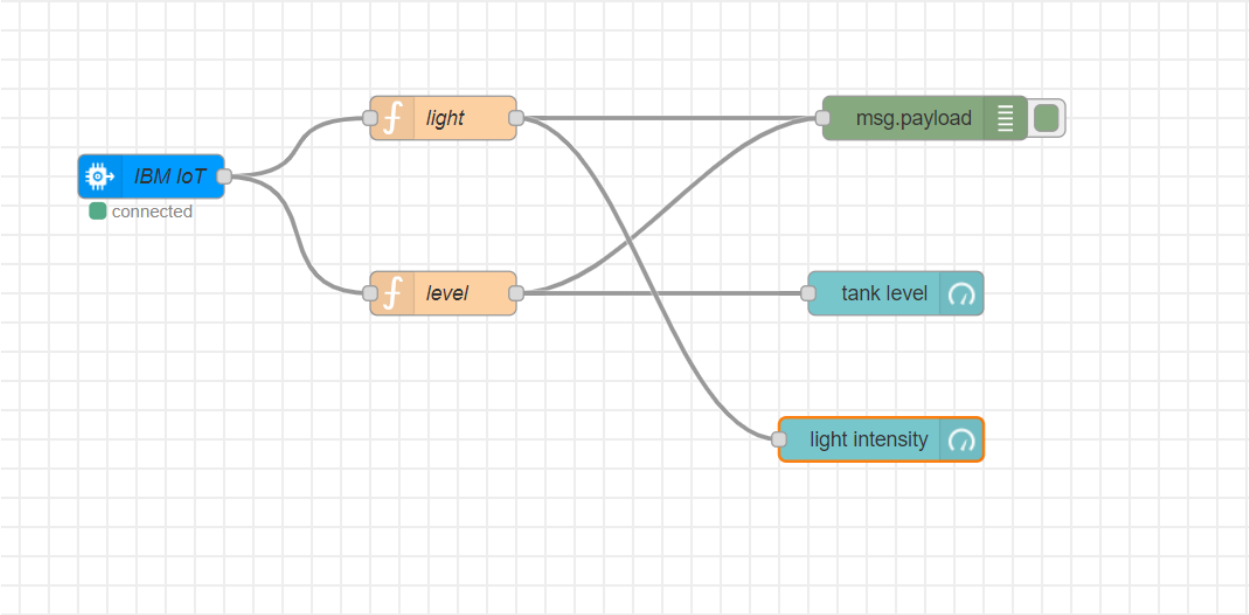


CODE:

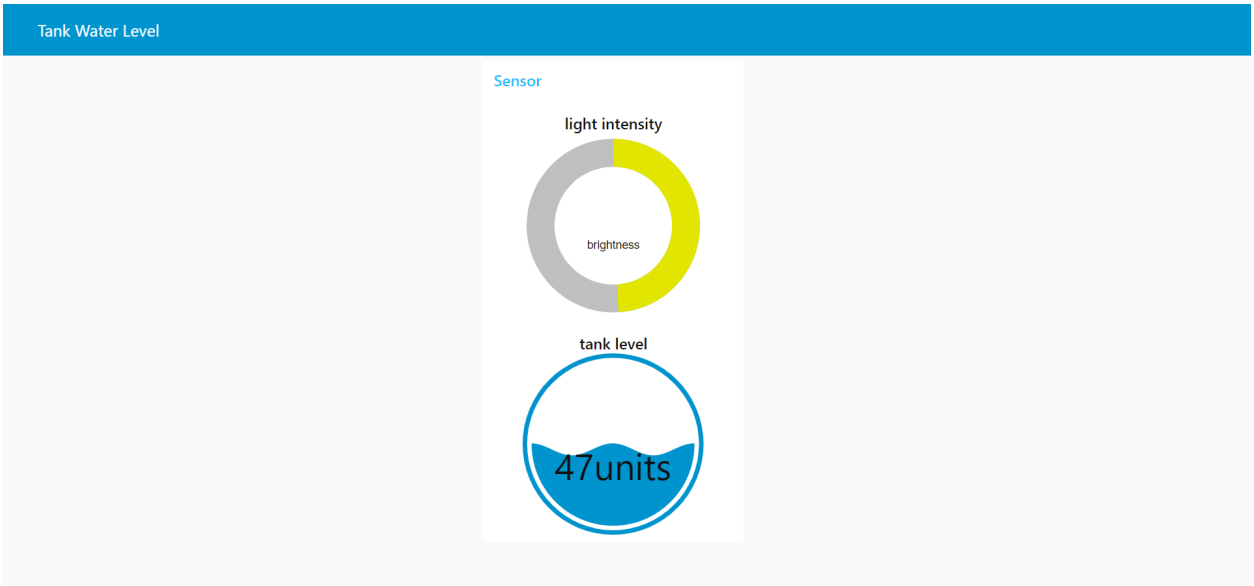
```
import wiotp.sdk.device
import time
```

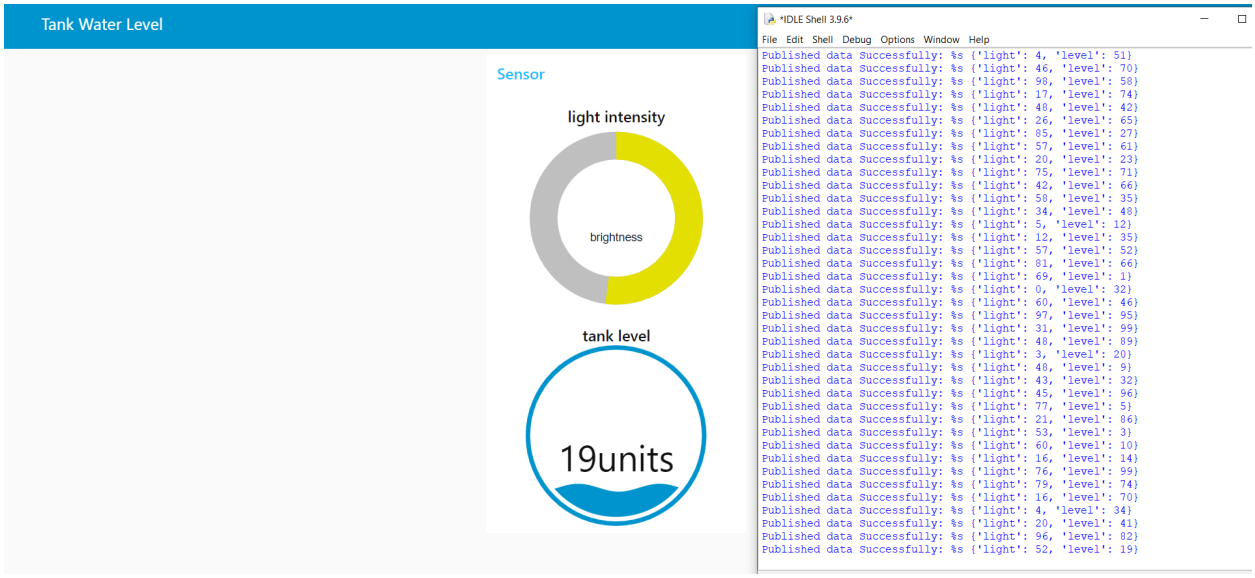
```
import random
myConfig = {
    "identity": {
        "orgId": "sm9zoz",
        "typeId": "SREECHARAN",
        "deviceId":"12345"
    },
    "auth": {
        "token": "6304531136"
    }
}

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(0,100)
    hum=random.randint(0,100)
    myData={'light':temp, 'level':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()
```

Node flow:



Output received in web page:




Tank Water Level
Sensor
light intensity
brightness
tank level
19units
IDLE Shell 3.9.6
File Edit Shell Debug Options Window Help
Published data Successfully: %s {'light': 4, 'level': 51}
Published data Successfully: %s {'light': 46, 'level': 70}
Published data Successfully: %s {'light': 98, 'level': 58}
Published data Successfully: %s {'light': 17, 'level': 74}
Published data Successfully: %s {'light': 48, 'level': 42}
Published data Successfully: %s {'light': 26, 'level': 65}
Published data Successfully: %s {'light': 85, 'level': 27}
Published data Successfully: %s {'light': 57, 'level': 61}
Published data Successfully: %s {'light': 20, 'level': 23}
Published data Successfully: %s {'light': 75, 'level': 71}
Published data Successfully: %s {'light': 42, 'level': 66}
Published data Successfully: %s {'light': 58, 'level': 35}
Published data Successfully: %s {'light': 34, 'level': 48}
Published data Successfully: %s {'light': 5, 'level': 12}
Published data Successfully: %s {'light': 12, 'level': 35}
Published data Successfully: %s {'light': 57, 'level': 52}
Published data Successfully: %s {'light': 81, 'level': 66}
Published data Successfully: %s {'light': 69, 'level': 1}
Published data Successfully: %s {'light': 0, 'level': 32}
Published data Successfully: %s {'light': 60, 'level': 46}
Published data Successfully: %s {'light': 97, 'level': 95}
Published data Successfully: %s {'light': 31, 'level': 99}
Published data Successfully: %s {'light': 48, 'level': 89}
Published data Successfully: %s {'light': 3, 'level': 20}
Published data Successfully: %s {'light': 48, 'level': 9}
Published data Successfully: %s {'light': 43, 'level': 32}
Published data Successfully: %s {'light': 45, 'level': 96}
Published data Successfully: %s {'light': 77, 'level': 5}
Published data Successfully: %s {'light': 21, 'level': 86}
Published data Successfully: %s {'light': 53, 'level': 3}
Published data Successfully: %s {'light': 60, 'level': 10}
Published data Successfully: %s {'light': 16, 'level': 14}
Published data Successfully: %s {'light': 76, 'level': 99}
Published data Successfully: %s {'light': 79, 'level': 74}
Published data Successfully: %s {'light': 16, 'level': 70}
Published data Successfully: %s {'light': 4, 'level': 34}
Published data Successfully: %s {'light': 20, 'level': 41}
Published data Successfully: %s {'light': 96, 'level': 82}
Published data Successfully: %s {'light': 52, 'level': 19}