

Python code:-

```
import wiotp.sdk.device

import time

import random

myConfig = {

    "identity": {

        "orgId": "6teby0",

        "typeId": "water",

        "deviceId": "54321"

    },

    "auth": {

        "token": "87654321"

    }

}


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:

    waterLevel=random.randint(0,125)

    lightIntensity=random.randint(0,1000)

    myData={'waterLevel':waterLevel, 'lightIntensity':lightIntensity}
```

```
client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
```

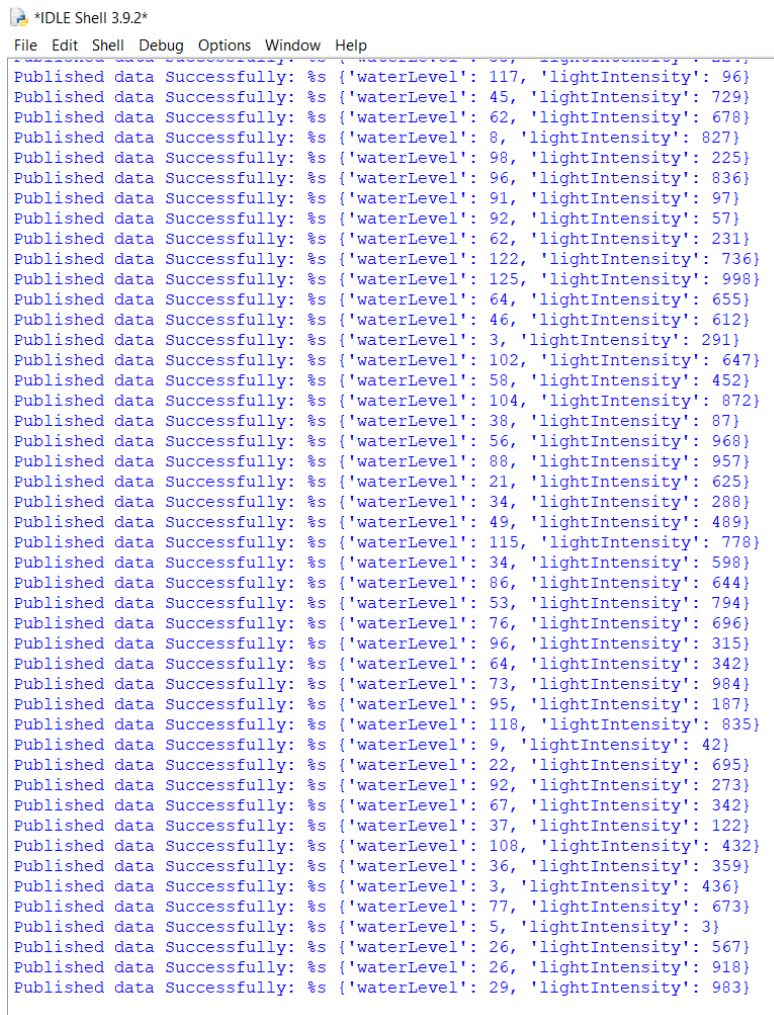
```
print("Published data Successfully: %s", myData)
```

```
client.commandCallback = myCommandCallback
```

```
time.sleep(2)
```

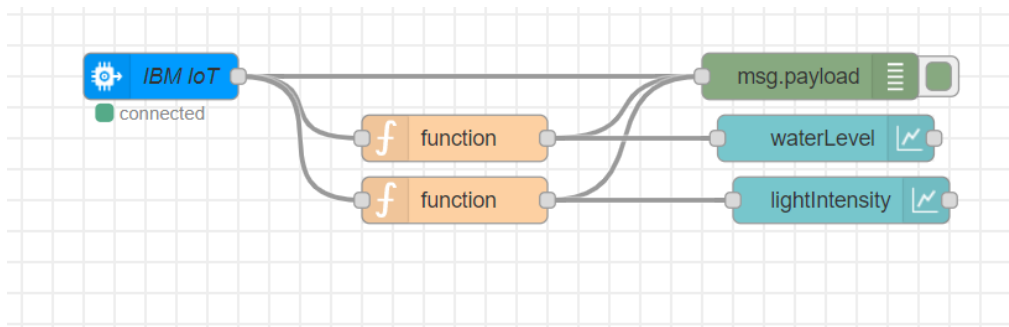
```
client.disconnect()
```

pyhton code output:-

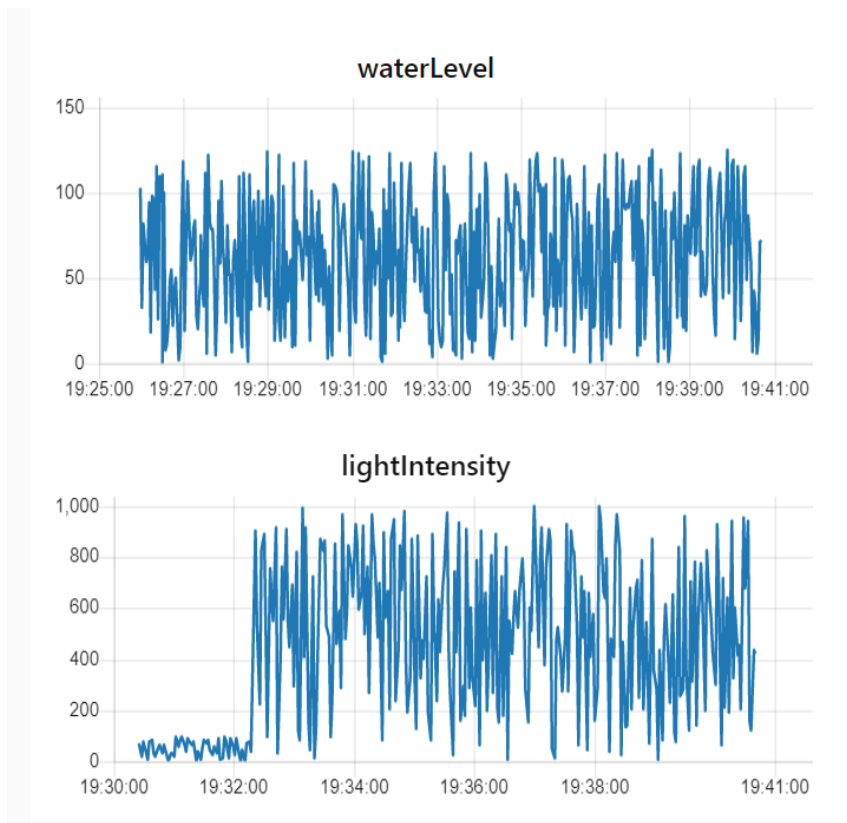


```
*IDLE Shell 3.9.2*
File Edit Shell Debug Options Window Help
Published data Successfully: %s {'waterLevel': 117, 'lightIntensity': 96}
Published data Successfully: %s {'waterLevel': 45, 'lightIntensity': 729}
Published data Successfully: %s {'waterLevel': 62, 'lightIntensity': 678}
Published data Successfully: %s {'waterLevel': 8, 'lightIntensity': 827}
Published data Successfully: %s {'waterLevel': 98, 'lightIntensity': 225}
Published data Successfully: %s {'waterLevel': 96, 'lightIntensity': 836}
Published data Successfully: %s {'waterLevel': 91, 'lightIntensity': 97}
Published data Successfully: %s {'waterLevel': 92, 'lightIntensity': 57}
Published data Successfully: %s {'waterLevel': 62, 'lightIntensity': 231}
Published data Successfully: %s {'waterLevel': 122, 'lightIntensity': 736}
Published data Successfully: %s {'waterLevel': 125, 'lightIntensity': 998}
Published data Successfully: %s {'waterLevel': 64, 'lightIntensity': 655}
Published data Successfully: %s {'waterLevel': 46, 'lightIntensity': 612}
Published data Successfully: %s {'waterLevel': 3, 'lightIntensity': 291}
Published data Successfully: %s {'waterLevel': 102, 'lightIntensity': 647}
Published data Successfully: %s {'waterLevel': 58, 'lightIntensity': 452}
Published data Successfully: %s {'waterLevel': 104, 'lightIntensity': 872}
Published data Successfully: %s {'waterLevel': 38, 'lightIntensity': 87}
Published data Successfully: %s {'waterLevel': 56, 'lightIntensity': 968}
Published data Successfully: %s {'waterLevel': 88, 'lightIntensity': 957}
Published data Successfully: %s {'waterLevel': 21, 'lightIntensity': 625}
Published data Successfully: %s {'waterLevel': 34, 'lightIntensity': 288}
Published data Successfully: %s {'waterLevel': 49, 'lightIntensity': 489}
Published data Successfully: %s {'waterLevel': 115, 'lightIntensity': 778}
Published data Successfully: %s {'waterLevel': 34, 'lightIntensity': 598}
Published data Successfully: %s {'waterLevel': 86, 'lightIntensity': 644}
Published data Successfully: %s {'waterLevel': 53, 'lightIntensity': 794}
Published data Successfully: %s {'waterLevel': 76, 'lightIntensity': 696}
Published data Successfully: %s {'waterLevel': 96, 'lightIntensity': 315}
Published data Successfully: %s {'waterLevel': 64, 'lightIntensity': 342}
Published data Successfully: %s {'waterLevel': 73, 'lightIntensity': 984}
Published data Successfully: %s {'waterLevel': 95, 'lightIntensity': 187}
Published data Successfully: %s {'waterLevel': 118, 'lightIntensity': 835}
Published data Successfully: %s {'waterLevel': 9, 'lightIntensity': 42}
Published data Successfully: %s {'waterLevel': 22, 'lightIntensity': 695}
Published data Successfully: %s {'waterLevel': 92, 'lightIntensity': 273}
Published data Successfully: %s {'waterLevel': 67, 'lightIntensity': 342}
Published data Successfully: %s {'waterLevel': 37, 'lightIntensity': 122}
Published data Successfully: %s {'waterLevel': 108, 'lightIntensity': 432}
Published data Successfully: %s {'waterLevel': 36, 'lightIntensity': 359}
Published data Successfully: %s {'waterLevel': 3, 'lightIntensity': 436}
Published data Successfully: %s {'waterLevel': 77, 'lightIntensity': 673}
Published data Successfully: %s {'waterLevel': 5, 'lightIntensity': 3}
Published data Successfully: %s {'waterLevel': 26, 'lightIntensity': 567}
Published data Successfully: %s {'waterLevel': 26, 'lightIntensity': 918}
Published data Successfully: %s {'waterLevel': 29, 'lightIntensity': 983}
```

node red:-



output:-



(I used text for displaying the water level but in didn't show multiple values at once hence I used chart for visual purpose)

(the avg light intensity value in daily life is around 500-1000lux)

URL:-

<https://node-red-newgz-2021-07-08.eu-gb.mybluemix.net/ui/#!/0?socketid=FR06otYseFgN8xS-AAAL>