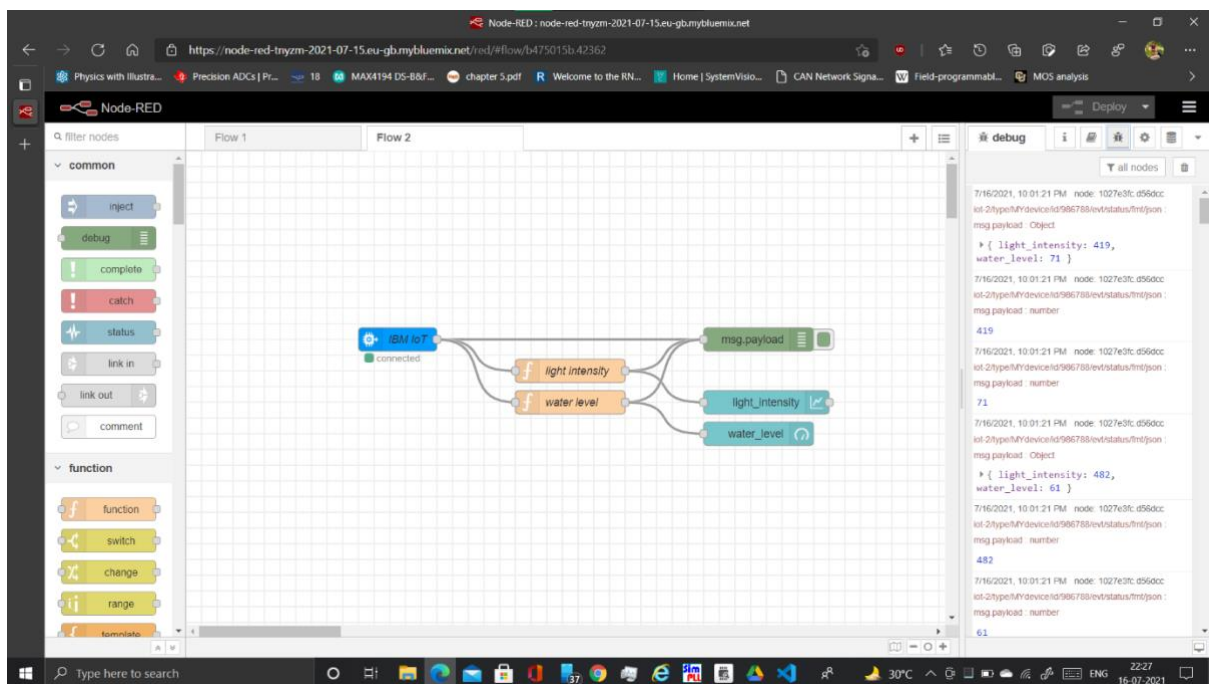


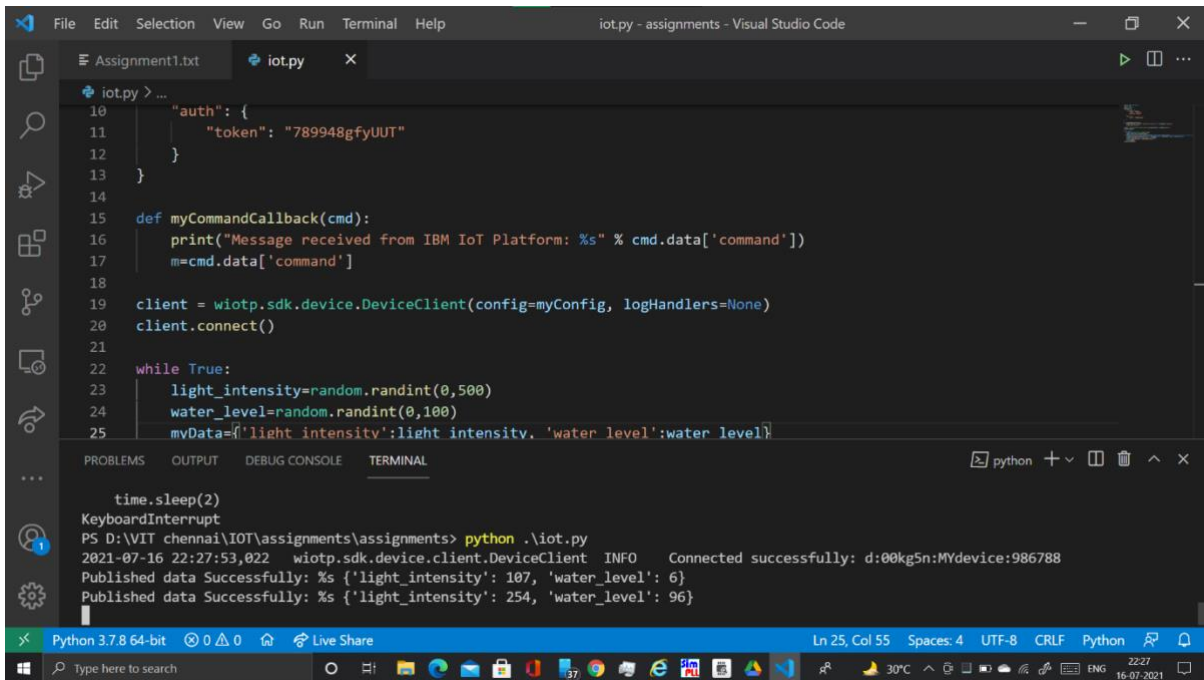
Data received in node red :



Python code which publishes water level and light intensity :

```
iot.py > ...
1 import wiotp.sdk.device
2 import time
3 import random
4 myConfig = {
5     "identity": {
6         "orgId": "00kg5n",
7         "typeId": "MYdevice",
8         "deviceId": "986788"
9     },
10    "auth": {
11        "token": "789948gfyUUT"
12    }
13 }
14
15 def myCommandCallback(cmd):
16     print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
17     m=cmd.data['command']
18
19 client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
20 client.connect()
21
22 while True:
23     light_intensity=random.randint(0,500)
24     water_level=random.randint(0,100)
25     myData={'light_intensity':light_intensity, 'water_level':water_level}
26     client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
27     print("Published data Successfully: %s", myData)
28     client.commandCallback = myCommandCallback
29     time.sleep(2)
30 client.disconnect()
```

Python code publishing water level and light intensity data to cloud :



The screenshot shows the Visual Studio Code editor with a file named `iot.py`. The code defines an authentication token, a callback function for commands, and a loop that publishes random light intensity and water level data to the cloud. The terminal window shows the successful execution of the script, including connection status and published data points.

```
10  "auth": {
11      "token": "789948gfyUUT"
12  }
13  }
14
15  def myCommandCallback(cmd):
16      print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
17      m=cmd.data['command']
18
19  client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
20  client.connect()
21
22  while True:
23      light_intensity=random.randint(0,500)
24      water_level=random.randint(0,100)
25      mvData={"light_intensity":light_intensity, 'water_level':water_level}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
time.sleep(2)
KeyboardInterrupt
PS D:\VIT chennai\IOT\assignments\assignments> python .\iot.py
2021-07-16 22:27:53,022 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:00kg5n:MYdevice:986788
Published data Successfully: %s {'light_intensity': 107, 'water_level': 6}
Published data Successfully: %s {'light_intensity': 254, 'water_level': 96}
```

Data viewed from web application :

