

Delivery of Sprint -2

Date	15 November 2022
Team ID	PNT2022TMID42279
Project Title	Project- Smart Waste Management System in Metropolitan Cities
Maximum Marks	2

Code:

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

myConfig = {
    "identity":{
        "orgId":"udgvx5",
        "typeId":"Python",
        "deviceId":"Test1"
    },
    "auth":{
        "token":"IBM_TEAM@123"
    }
}

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()

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

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

while True:

```
myData={'name':'Bin1','lat': 13.08005,'lon': 80.27009}
```

```
pub(myData)
```

```
time.sleep(3)
```

```
myData={'name':'Bin1','lat': 13.09005,'lon': 80.28009}
```

```
pub(myData)
```

```
time.sleep(3)
```

```
myData={'name':'Bin1','lat': 13.08905,'lon': 80.27909}
```

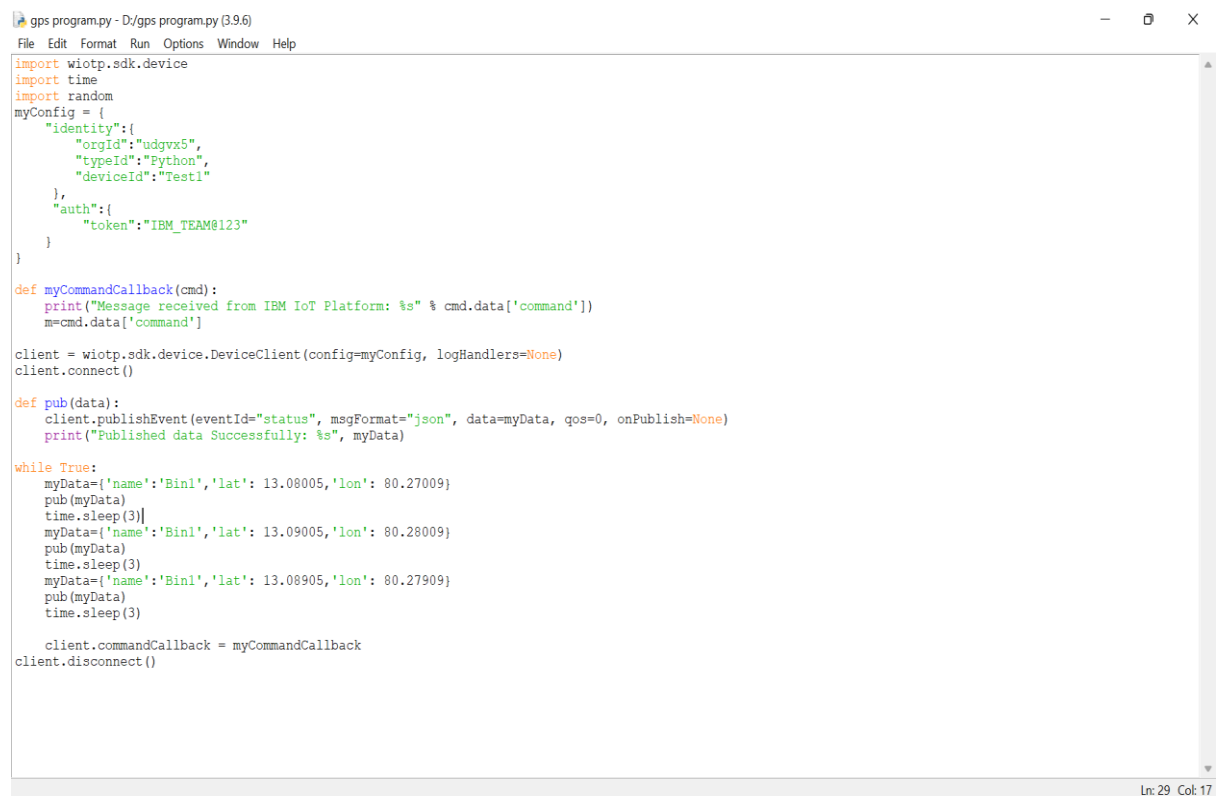
```
pub(myData)
```

```
time.sleep(3)
```

```
client.commandCallback = myCommandCallback
```

```
client.disconnect()
```

Python Code:



```
gps program.py - D:/gps program.py (3.9.6)
File Edit Format Run Options Window Help

import wiotp.sdk.device
import time
import random
myConfig = {
    "identity":{
        "orgId":"udgvx5",
        "typeId":"Python",
        "deviceId":"Test1"
    },
    "auth":{
        "token":"IBM_TEAM@123"
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def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
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def pub(data):
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)

while True:
    myData={'name':'Bin1','lat': 13.08005,'lon': 80.27009}
    pub(myData)
    time.sleep(3)
    myData={'name':'Bin1','lat': 13.09005,'lon': 80.28009}
    pub(myData)
    time.sleep(3)
    myData={'name':'Bin1','lat': 13.08905,'lon': 80.27909}
    pub(myData)
    time.sleep(3)

    client.commandCallback = myCommandCallback
client.disconnect()
```

Ln: 29 Col: 17

Python Output:

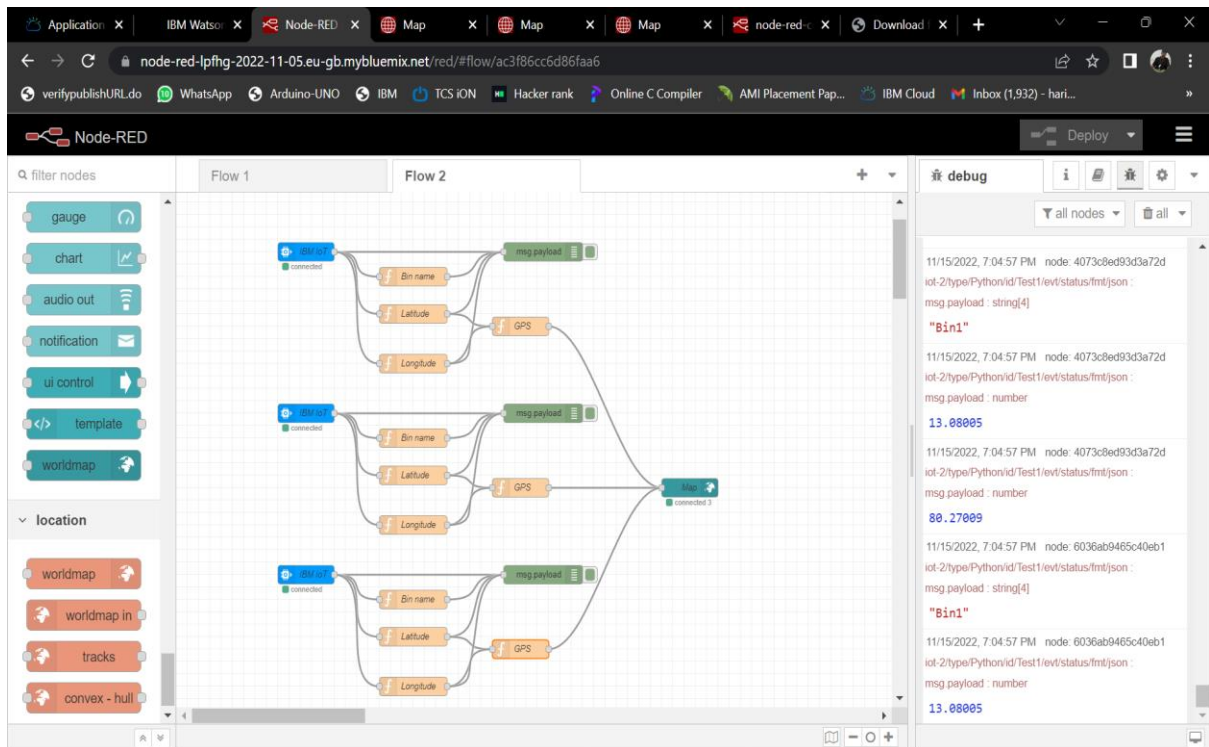
[illegible]

IBM Watson Output:

The screenshot shows the IBM Watson IoT Platform interface. The top navigation bar includes the IBM logo and the text 'IBM Watson IoT Platform'. The user's email 'g.guahan2202@gmail.com' and ID 'ID: udgvx5' are displayed. The main content area is titled 'Browse' and shows a list of events for the device 'udgvx5'. The events are listed in a table with columns: Event, Value, Format, and Last Received. The events are all 'status' events with JSON values containing location data. The table shows 5 items, and the pagination indicates '1 of 1 page'.

Event	Value	Format	Last Received
status	{"name":"Bin1","lat":13.08905,"lon":80.27909}	json	a few seconds ago
status	{"name":"Bin1","lat":13.09005,"lon":80.28009}	json	a few seconds ago
status	{"name":"Bin1","lat":13.08005,"lon":80.27009}	json	a few seconds ago
status	{"name":"Bin1","lat":13.08905,"lon":80.27909}	json	a few seconds ago
status	{"name":"Bin1","lat":13.09005,"lon":80.28009}	json	a few seconds ago

NodeRed Flow Diagram:



Web UI:

