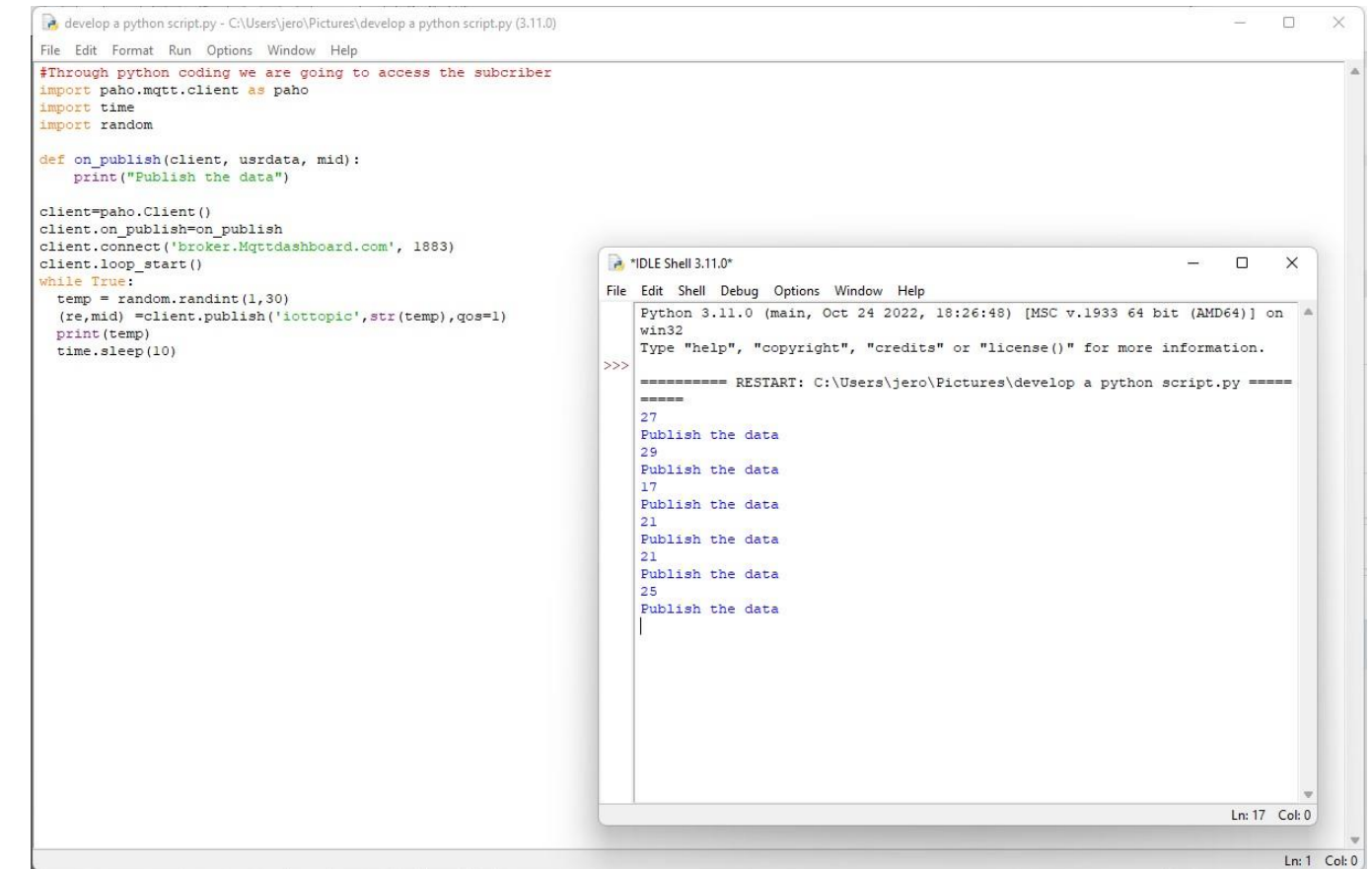


# DEVELOP A WEB APPLICATION USING NODE-RED SERVICE

## Publish Data To The IBM Cloud

Date	31 October 2022
Team ID	PNT2022TMID47905
Project Name	SIGNS WITH SMART CONNECTIVITY FOR BETTER ROAD
Maximum Marks	4 Marks

### Signs with smart connectivity for Better road safety

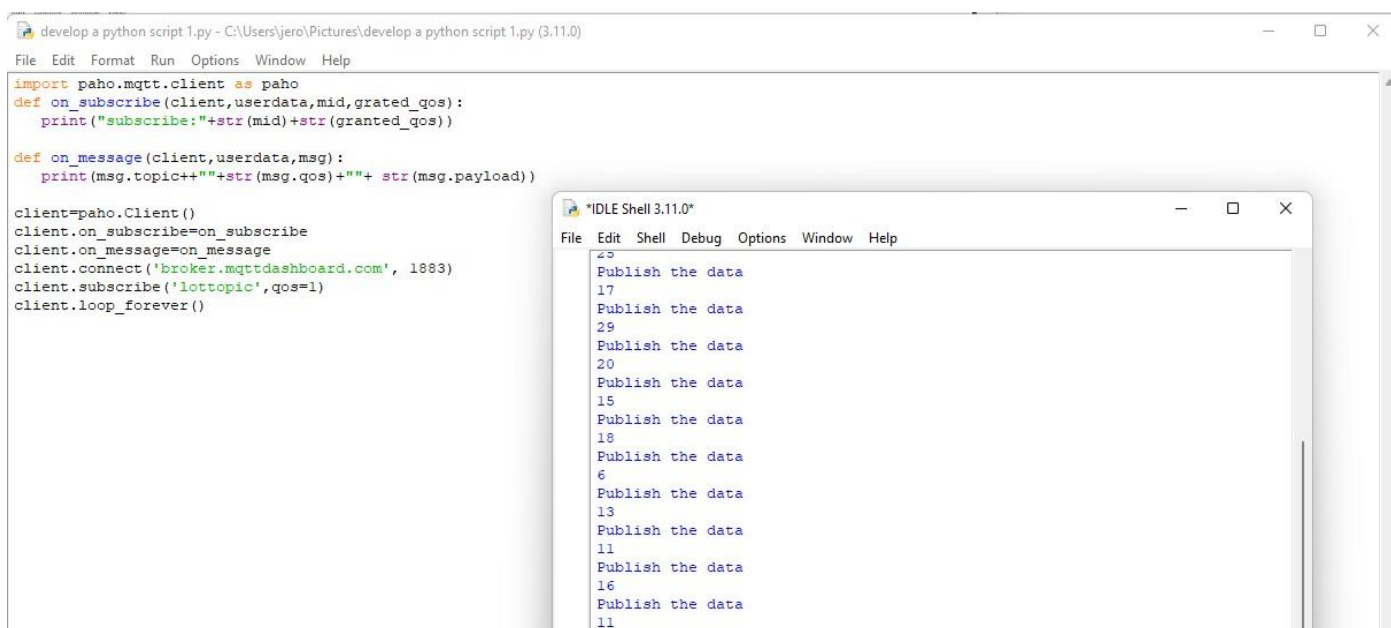


```
develop a python script.py - C:\Users\jero\Pictures\develop a python script.py (3.11.0)
File Edit Format Run Options Window Help
#Through python coding we are going to access the subscriber
import paho.mqtt.client as paho
import time
import random

def on_publish(client, userdata, mid):
    print("Publish the data")

client=paho.Client()
client.on_publish=on_publish
client.connect('broker.mqttdashboard.com', 1883)
client.loop_start()
while True:
    temp = random.randint(1,30)
    (re,mid) =client.publish('l0ttopic',str(temp),qos=1)
    print(temp)
    time.sleep(10)
```

```
"IDLE Shell 3.11.0"
File Edit Shell Debug Options Window Help
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\jero\Pictures\develop a python script.py =====
27
Publish the data
29
Publish the data
17
Publish the data
21
Publish the data
21
Publish the data
25
Publish the data
|
Ln: 17 Col: 0
```

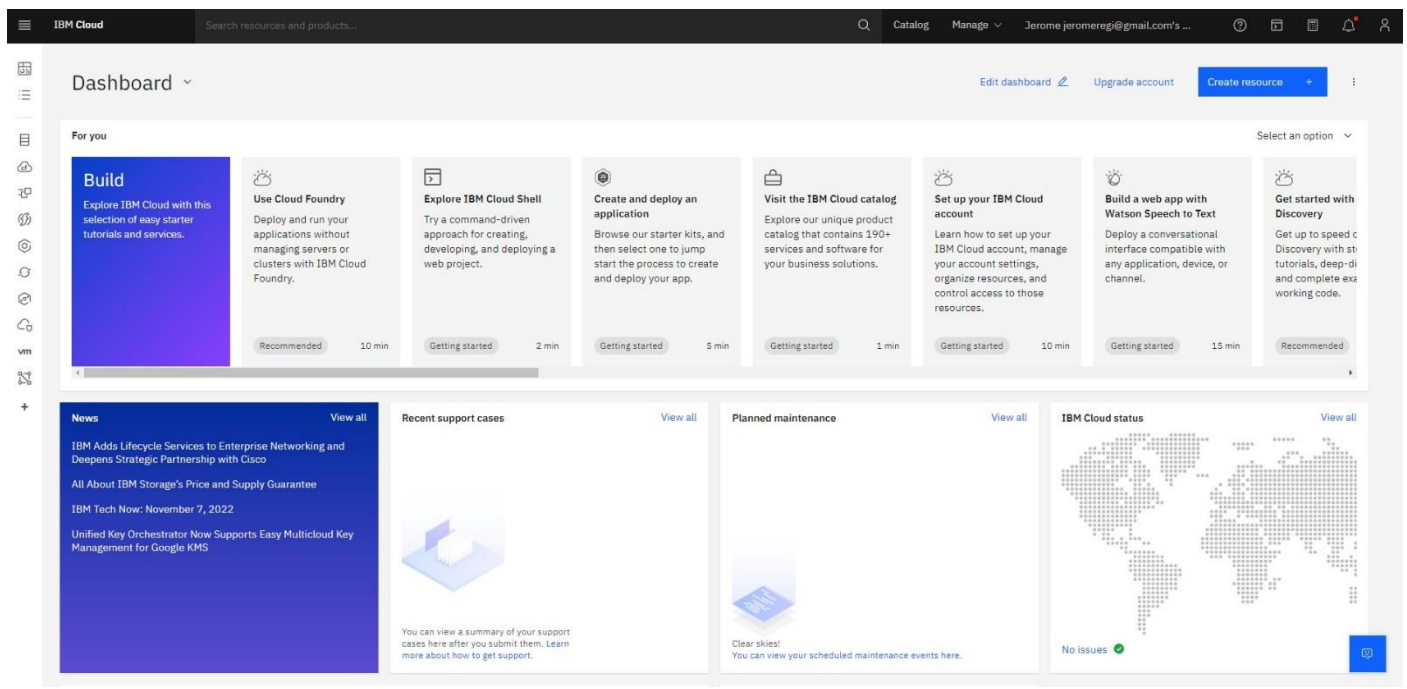
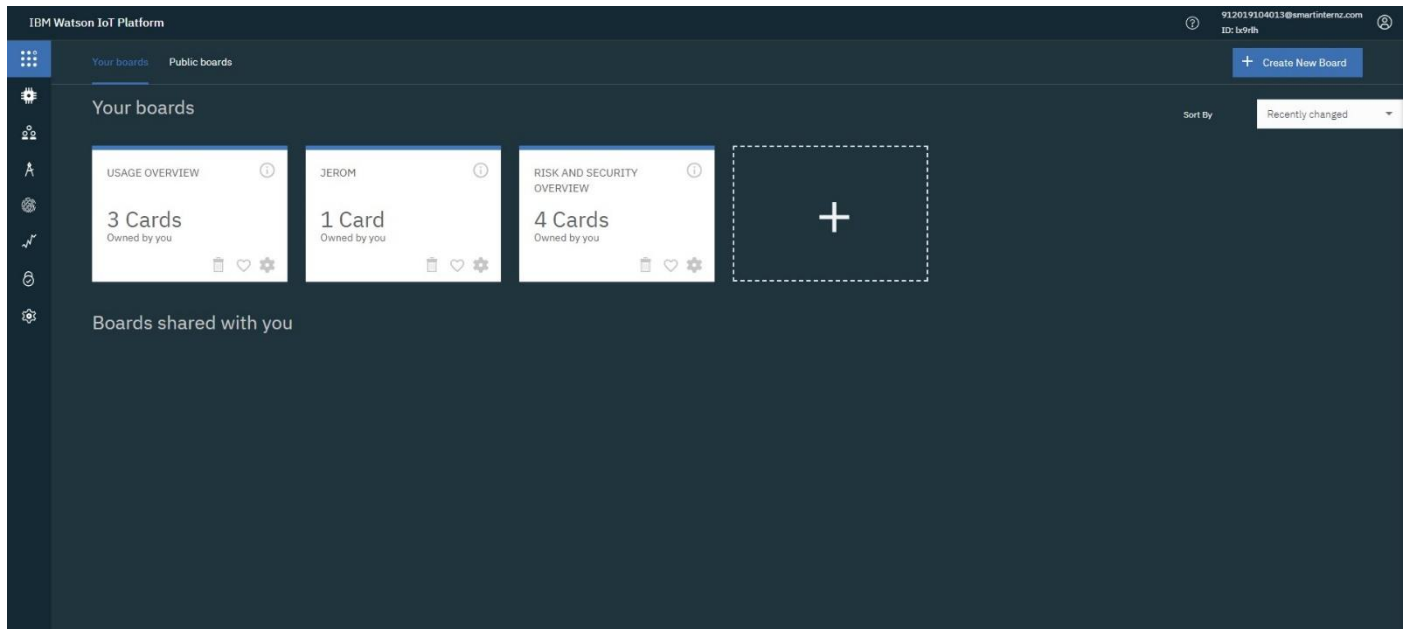


```
develop a python script 1.py - C:\Users\jero\Pictures\develop a python script 1.py (3.11.0)
File Edit Format Run Options Window Help
import paho.mqtt.client as paho
def on_subscribe(client,userdata,mid,grated_qos):
    print("subscribe:"+str(mid)+str(granted_qos))

def on_message(client,userdata,msg):
    print(msg.topic+" "+str(msg.qos)+" "+str(msg.payload))

client=paho.Client()
client.on_subscribe=on_subscribe
client.on_message=on_message
client.connect('broker.mqttdashboard.com', 1883)
client.subscribe('l0ttopic',qos=1)
client.loop_forever()
```

```
"IDLE Shell 3.11.0"
File Edit Shell Debug Options Window Help
25
Publish the data
17
Publish the data
29
Publish the data
20
Publish the data
15
Publish the data
18
Publish the data
6
Publish the data
13
Publish the data
11
Publish the data
16
Publish the data
11
```



**Program:**

```
#IBM Watson IOT Platform #pip install wiotp-sdk import wiotp.sdk.device import time
import random

myConfig = {
    "identity": {
        "orgId": "lx9rlh",
        "typeId": "jerom",
        "deviceId": "1234" },
    "auth": { "token": "12345678" }
}

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(-20,125)
    hum=random.randint(0,100)
    myData={'temperature':temp, 'humidity':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()
```