DEVELOP A PYTHON SCRIPT

Publish Data to the IBM Cloud

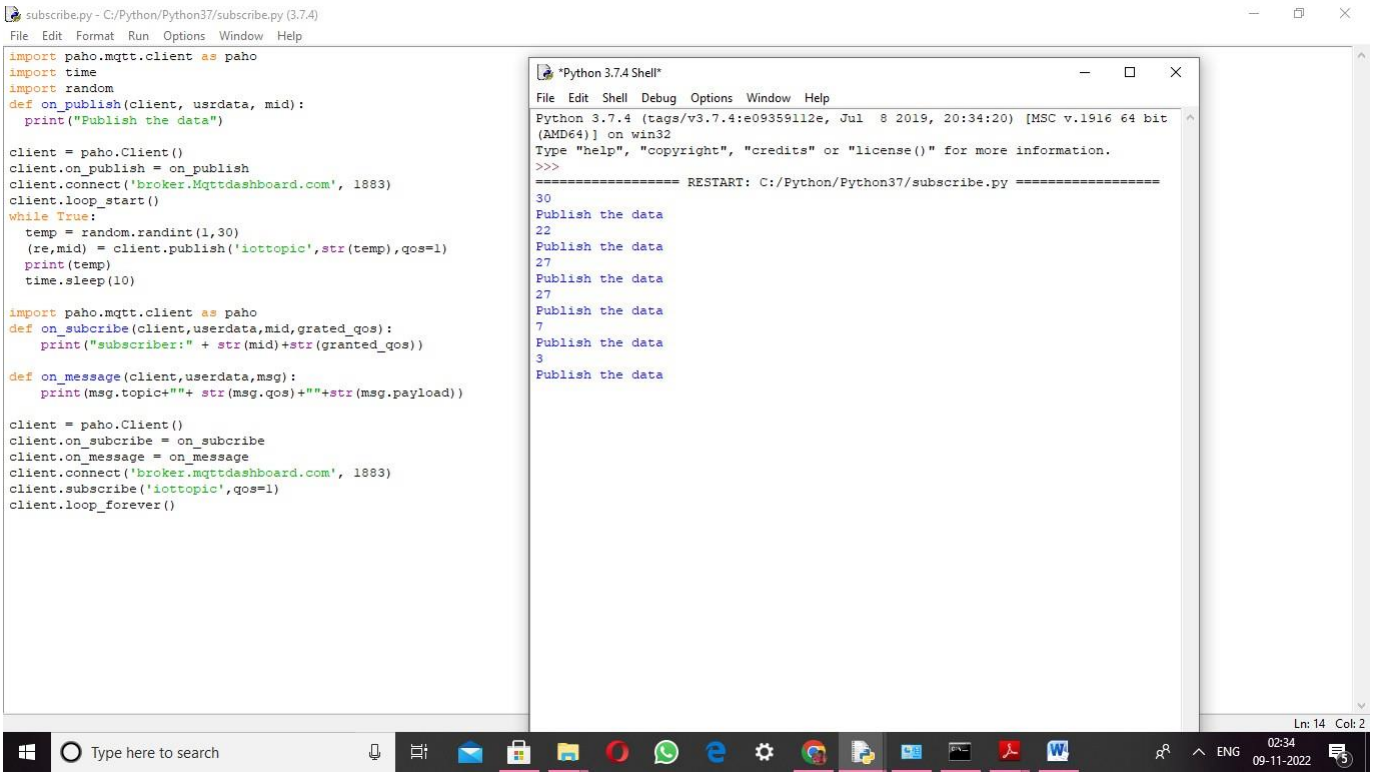
Date	31 october 2022
Team Id	PNT2022TMID12798
Project Name	Project - Signs with smart connectivity for Better road safety

Signs with smart connectivity for Better road safety

Python code to access subscriber:

```
import paho.mqtt.client as paho
import time
import random
def on_publish(client, usrdata, 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('iottopic',str(temp),qos=1)
  print(temp)
  time.sleep(10)

import paho.mqtt.client as paho
def on_subcribe(client,userdata,mid,grated_qos):
    print("subscriber:" + 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_subcribe = on_subcribe
client.on_message = on_message
```

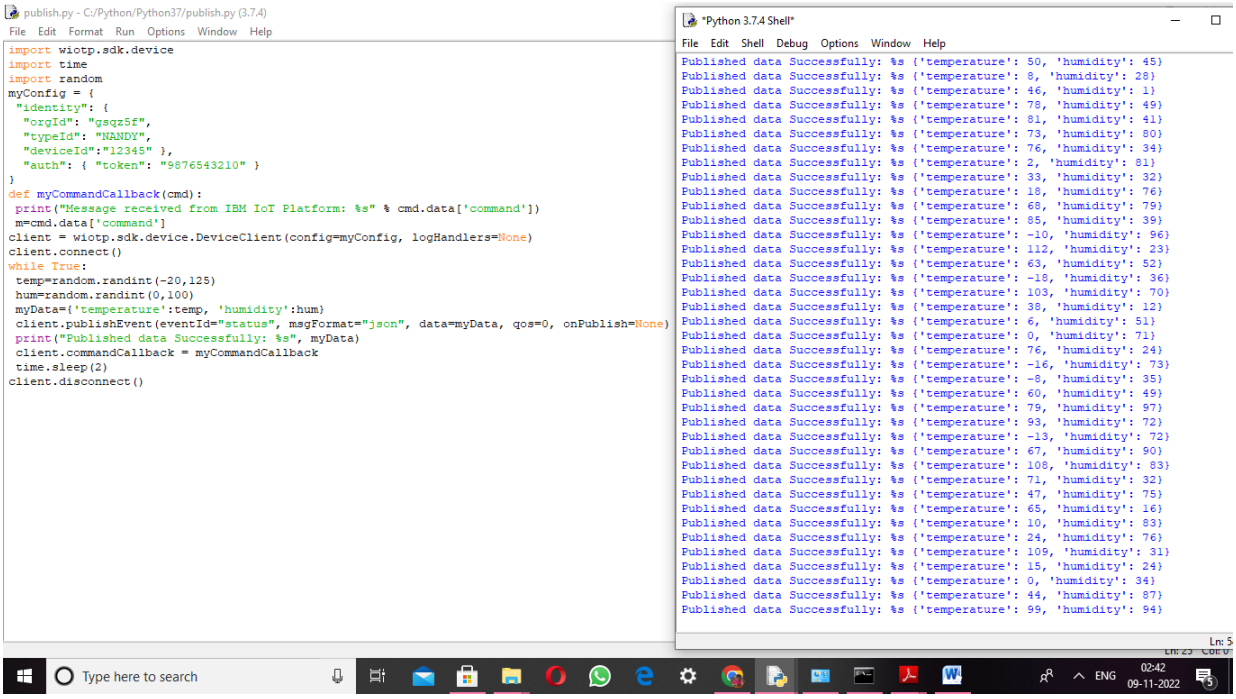
client.connect('broker.mqttdashboard.com', 1883)
client.subscribe('iottopic',qos=1)
client.loop_forever()



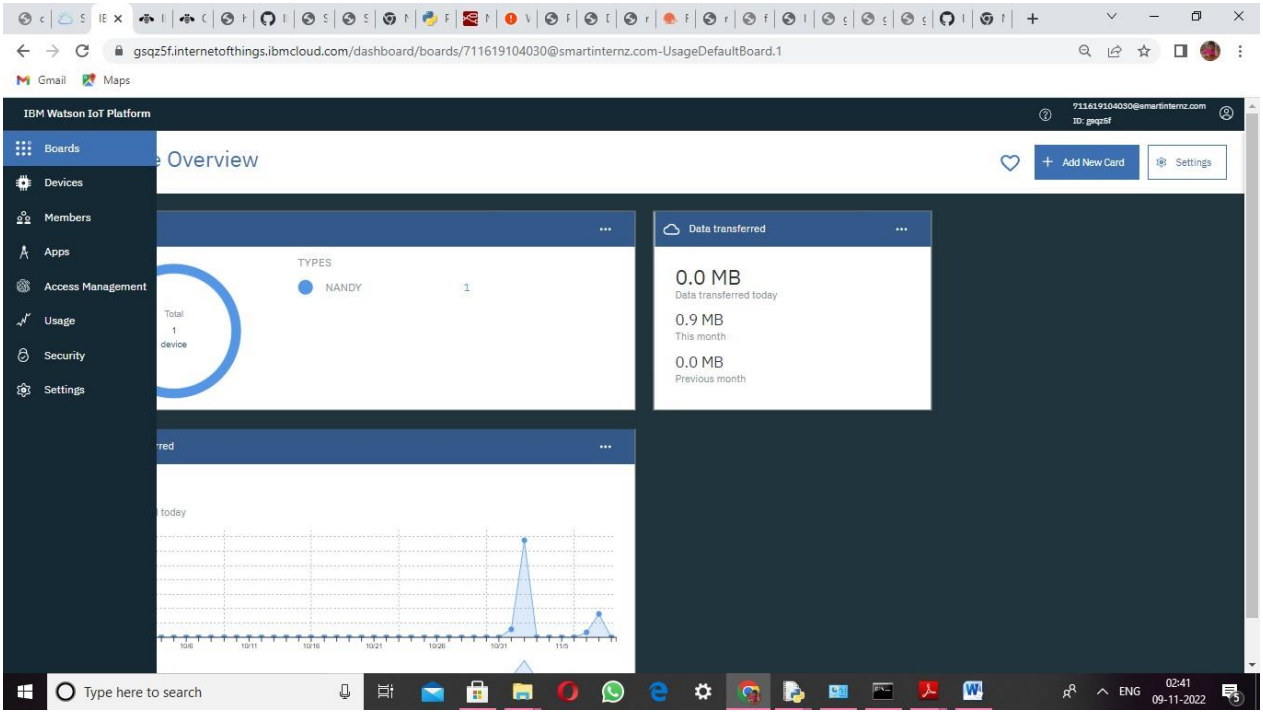
PROGRAM:

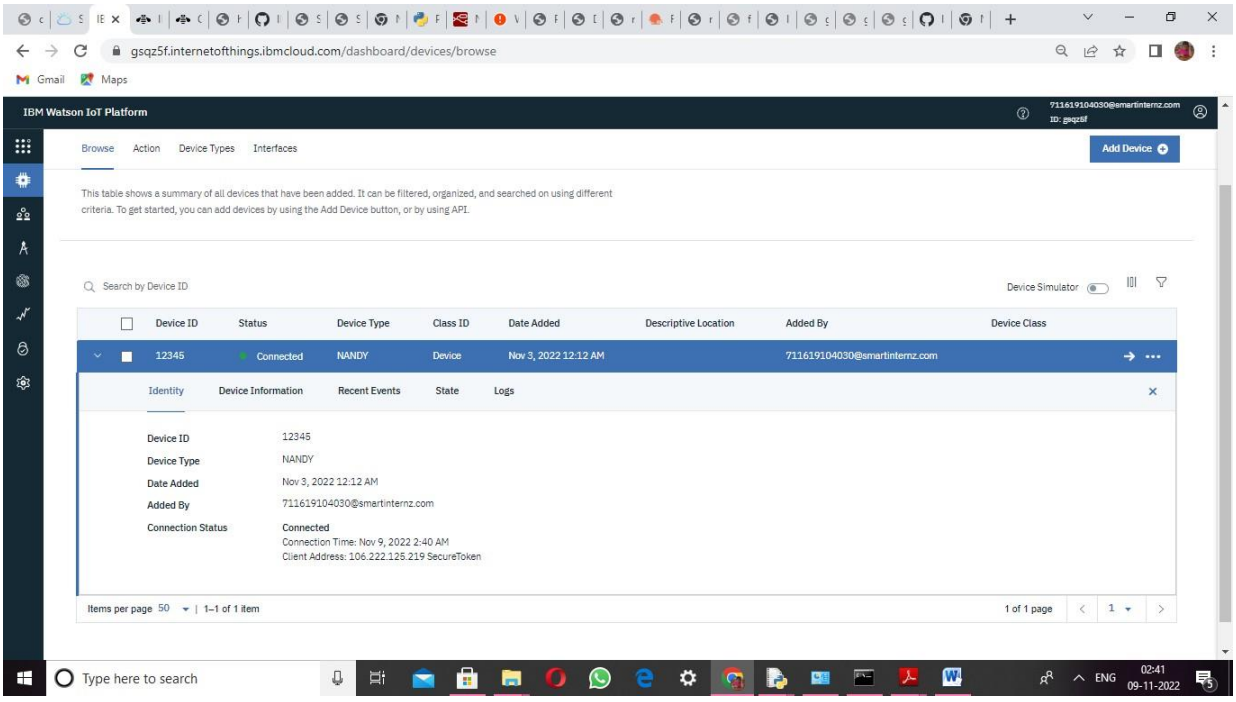
#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time
import random
myConfig = {
"identity": {
"orgId": "gsqz5f",
"typeId": "NANDY",
"deviceId":"12345" },
"auth": { "token": "9876543210" }
}
def myCommandCallback(cmd):

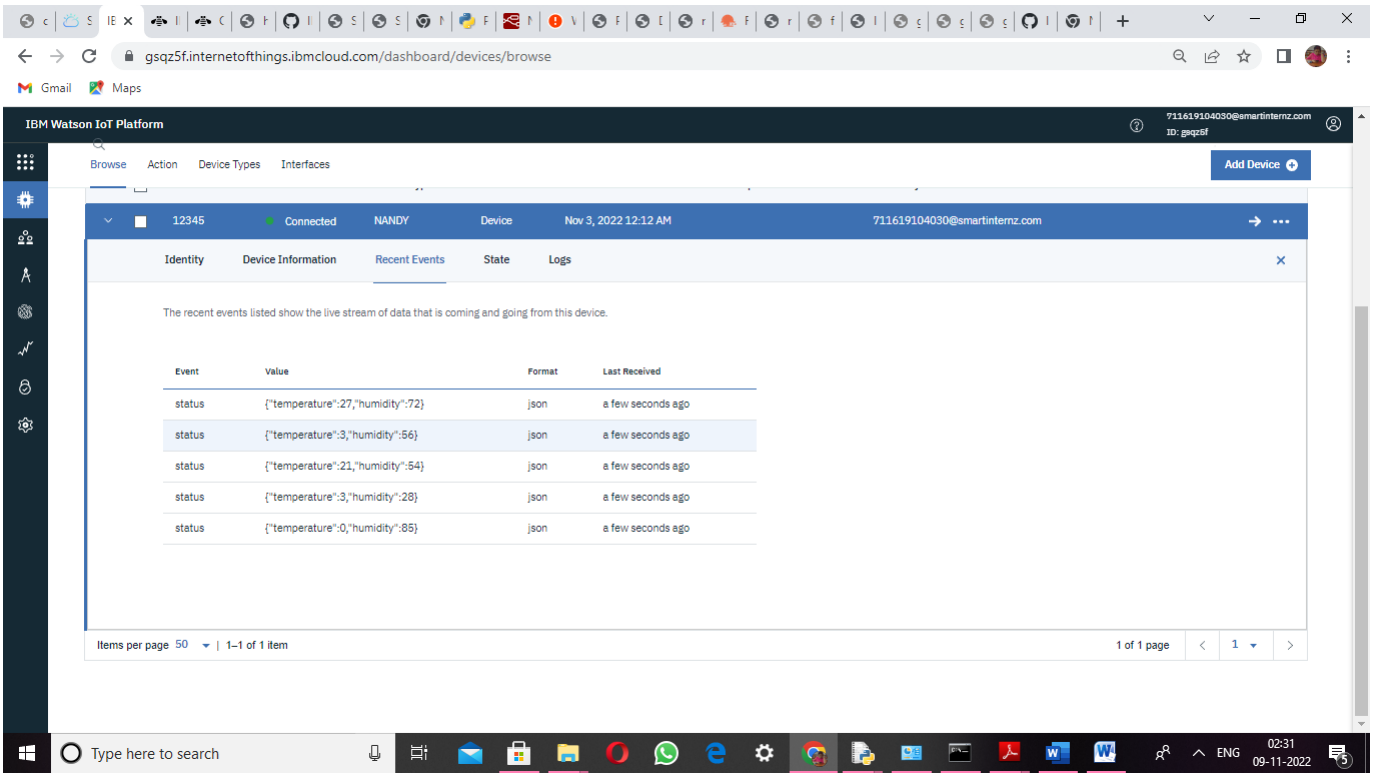
```
 print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
 m=cmd.data['command']
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
while True:
 temp=random.randint(-20,125)
 hum=random.randint(0,100)
 myData={'temperature':temp, 'humidity':hum}
 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()
```

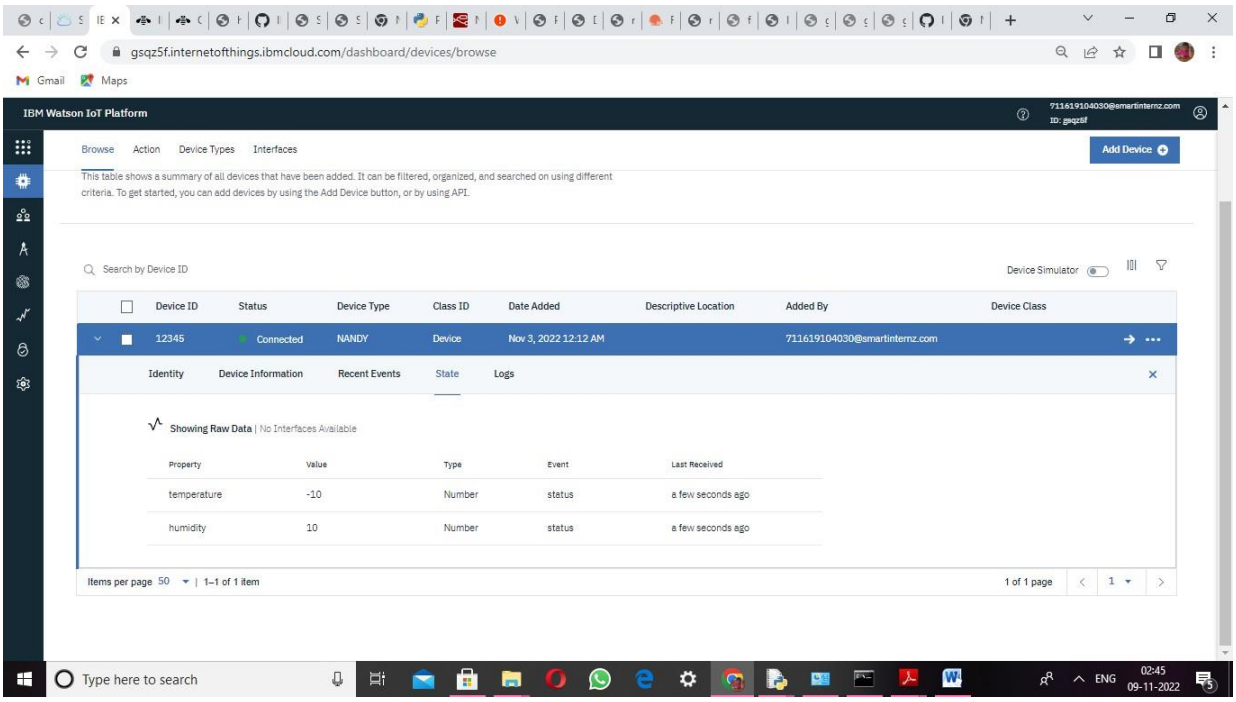


Publish the data to the ibm cloud:






gsqz5f.internetofthings.ibmcloud.com/dashboard/devices/browse
Gmail
Maps
IBM Watson IoT Platform
711619104030@smartinternz.com
ID: gsqz5f
Browse
Action
Device Types
Interfaces
Add Device
12345
Connected
NANDY
Device
Nov 3, 2022 12:12 AM
711619104030@smartinternz.com
Identity
Device Information
Recent Events
State
Logs
The recent events listed show the live stream of data that is coming and going from this device.
Event
Value
Format
Last Received
status
{"temperature":27,"humidity":72}
json
a few seconds ago
status
{"temperature":3,"humidity":56}
json
a few seconds ago
status
{"temperature":21,"humidity":54}
json
a few seconds ago
status
{"temperature":3,"humidity":28}
json
a few seconds ago
status
{"temperature":0,"humidity":85}
json
a few seconds ago
Items per page 50
1–1 of 1 item
1 of 1 page
1
Type here to search
ENG
02:31
09-11-2022


gsqz5f.internetofthings.ibmcloud.com/dashboard/devices/browse
Gmail
Maps
IBM Watson IoT Platform
711619104030@smartinternz.com
ID: gsqz5f
Browse
Action
Device Types
Interfaces
Add Device
This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.
Search by Device ID
Device Simulator
Device ID
Status
Device Type
Class ID
Date Added
Descriptive Location
Added By
Device Class
12345
Connected
NANDY
Device
Nov 3, 2022 12:12 AM
711619104030@smartinternz.com
Identity
Device Information
Recent Events
State
Logs
Showing Raw Data | No Interfaces Available
Property
Value
Type
Event
Last Received
temperature
-10
Number
status
a few seconds ago
humidity
10
Number
status
a few seconds ago
Items per page 50 | 1–1 of 1 item
1 of 1 page
1
Type here to search
ENG
02:45
09-11-2022