SPRINT 4

| | |
|---|---|
| **Date** | **16 November 2022** |
| **Team Id** | **PNT2022TMID36201** |
| **Project Name** | **Smart Waste Management System For Metropolitan Cities** |

## SENDING DATA FROM RASPERRYPI TO IBM CLOUD:

```
#IBM Watson IOT Platform

#pip install wiotp-sdk

import wiotp.sdk.device

import time

import random

myConfig = {

   "identity": {

      "orgId": "r1nl13",

      "typeId": "SathyaPriya",

      "deviceId":"2609"

   },

   "auth": {

      "token": "i5QqQIPGeqAES5iqgy"

   }

}
```

```
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:
   Dust = random.randint(0,100)
   if (Dust > 90):
      print("Dustbin Over Flow")
   myData={'Dustbin1':Dust}
   client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
onPublish=None)
   print(myData)
   client.commandCallback = myCommandCallback
   time.sleep(2)
##client.disconnect()
   if(Dust>80):
      print("")
   myData={'Dustbin2':Dust}
   client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
onPublish=None)
   print(myData)
```

```
    client.commandCallback = myCommandCallback
    time.sleep(2)
##client.disconnect()
    if(Dust>78):
        print("")
    myData={'Dustbin3':Dust}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
onPublish=None)
    print(myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
##client.disconnect()
    if(Dust>70):
        print("")
    myData={'Dustbin4':Dust}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
onPublish=None)
    print(myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```

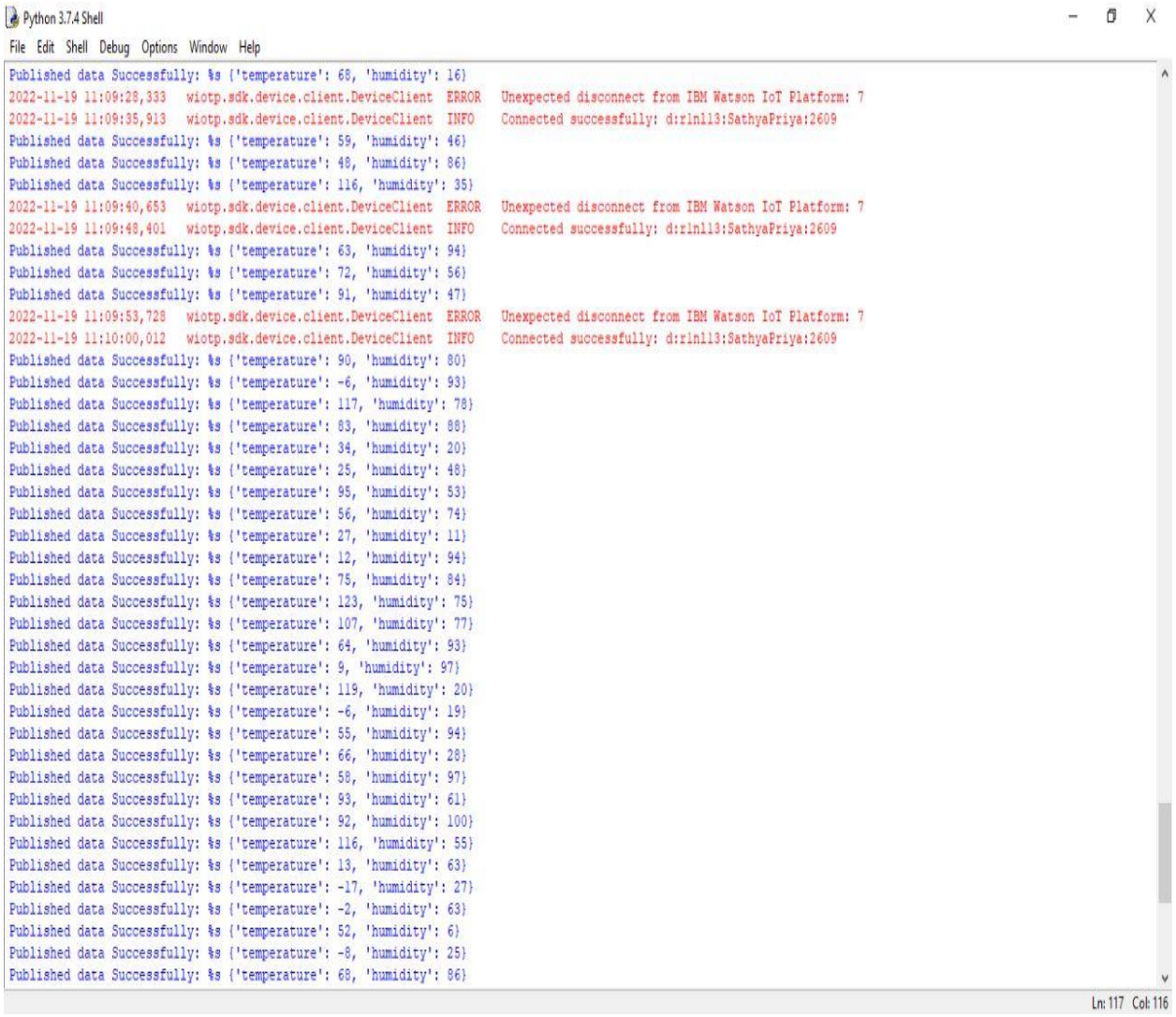
## PYTHON CODE:

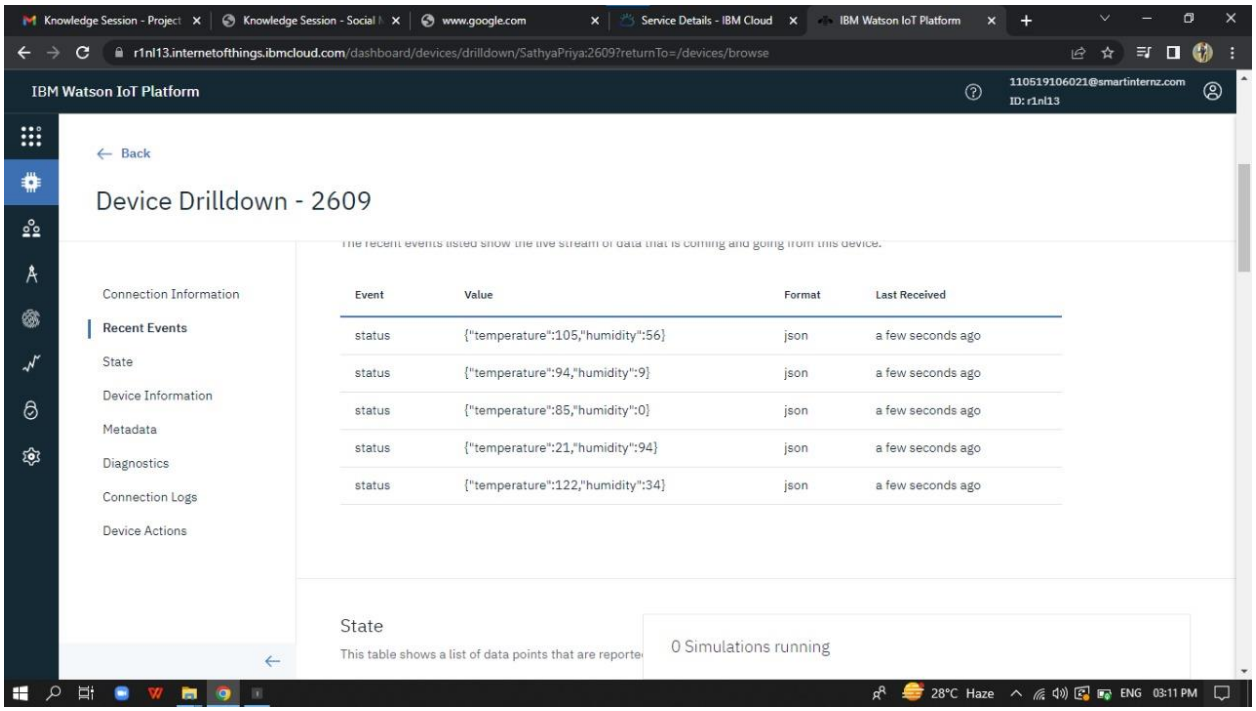
Demo.py - C:\Users\SRI RAJAM\Desktop\Demo.py (3.7.4)

File Edit Format Run Options Window Help

```
#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "rlnll3",
        "typeId": "SathyaPriya",
        "deviceId":"2609"
    },
    "auth": {
        "token": "i5QqQIPGeqAES5iqgy"
    }
}

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()
```

## OUTPUT:


Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Published data Successfully: %s {'temperature': 68, 'humidity': 16}
2022-11-19 11:09:28,333 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-11-19 11:09:35,913 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:rlnll3:SathyaPriya:2609
Published data Successfully: %s {'temperature': 59, 'humidity': 46}
Published data Successfully: %s {'temperature': 48, 'humidity': 86}
Published data Successfully: %s {'temperature': 116, 'humidity': 35}
2022-11-19 11:09:40,653 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-11-19 11:09:48,401 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:rlnll3:SathyaPriya:2609
Published data Successfully: %s {'temperature': 63, 'humidity': 94}
Published data Successfully: %s {'temperature': 72, 'humidity': 56}
Published data Successfully: %s {'temperature': 91, 'humidity': 47}
2022-11-19 11:09:53,728 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-11-19 11:10:00,012 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:rlnll3:SathyaPriya:2609
Published data Successfully: %s {'temperature': 90, 'humidity': 80}
Published data Successfully: %s {'temperature': -6, 'humidity': 93}
Published data Successfully: %s {'temperature': 117, 'humidity': 78}
Published data Successfully: %s {'temperature': 83, 'humidity': 88}
Published data Successfully: %s {'temperature': 34, 'humidity': 20}
Published data Successfully: %s {'temperature': 25, 'humidity': 48}
Published data Successfully: %s {'temperature': 95, 'humidity': 53}
Published data Successfully: %s {'temperature': 56, 'humidity': 74}
Published data Successfully: %s {'temperature': 27, 'humidity': 11}
Published data Successfully: %s {'temperature': 12, 'humidity': 94}
Published data Successfully: %s {'temperature': 75, 'humidity': 84}
Published data Successfully: %s {'temperature': 123, 'humidity': 75}
Published data Successfully: %s {'temperature': 107, 'humidity': 77}
Published data Successfully: %s {'temperature': 64, 'humidity': 93}
Published data Successfully: %s {'temperature': 9, 'humidity': 97}
Published data Successfully: %s {'temperature': 119, 'humidity': 20}
Published data Successfully: %s {'temperature': -6, 'humidity': 19}
Published data Successfully: %s {'temperature': 55, 'humidity': 94}
Published data Successfully: %s {'temperature': 66, 'humidity': 28}
Published data Successfully: %s {'temperature': 58, 'humidity': 97}
Published data Successfully: %s {'temperature': 93, 'humidity': 61}
Published data Successfully: %s {'temperature': 92, 'humidity': 100}
Published data Successfully: %s {'temperature': 116, 'humidity': 55}
Published data Successfully: %s {'temperature': 13, 'humidity': 63}
Published data Successfully: %s {'temperature': -17, 'humidity': 27}
Published data Successfully: %s {'temperature': -2, 'humidity': 63}
Published data Successfully: %s {'temperature': 52, 'humidity': 6}
Published data Successfully: %s {'temperature': -8, 'humidity': 25}
Published data Successfully: %s {'temperature': 68, 'humidity': 86}
Ln: 117 Col: 116


Knowledge Session - Project
Knowledge Session - Social
www.google.com
Service Details - IBM Cloud
IBM Watson IoT Platform
r1nl13.internetofthings.ibmcloud.com/dashboard/devices/drilldown/SathyaPriya:2609?returnTo=/devices/browse
IBM Watson IoT Platform
110519106021@smartinternz.com
ID: r1nl13
Back
Device Drilldown - 2609
Connection Information
Recent Events
State
Device Information
Metadata
Diagnostics
Connection Logs
Device Actions
Event
Value
Format
Last Received
status
{"temperature":105,"humidity":56}
json
a few seconds ago
status
{"temperature":94,"humidity":9}
json
a few seconds ago
status
{"temperature":85,"humidity":0}
json
a few seconds ago
status
{"temperature":21,"humidity":94}
json
a few seconds ago
status
{"temperature":122,"humidity":34}
json
a few seconds ago
State
This table shows a list of data points that are reporte
0 Simulations running
28°C Haze
ENG
03:11 PM