Develop the python script

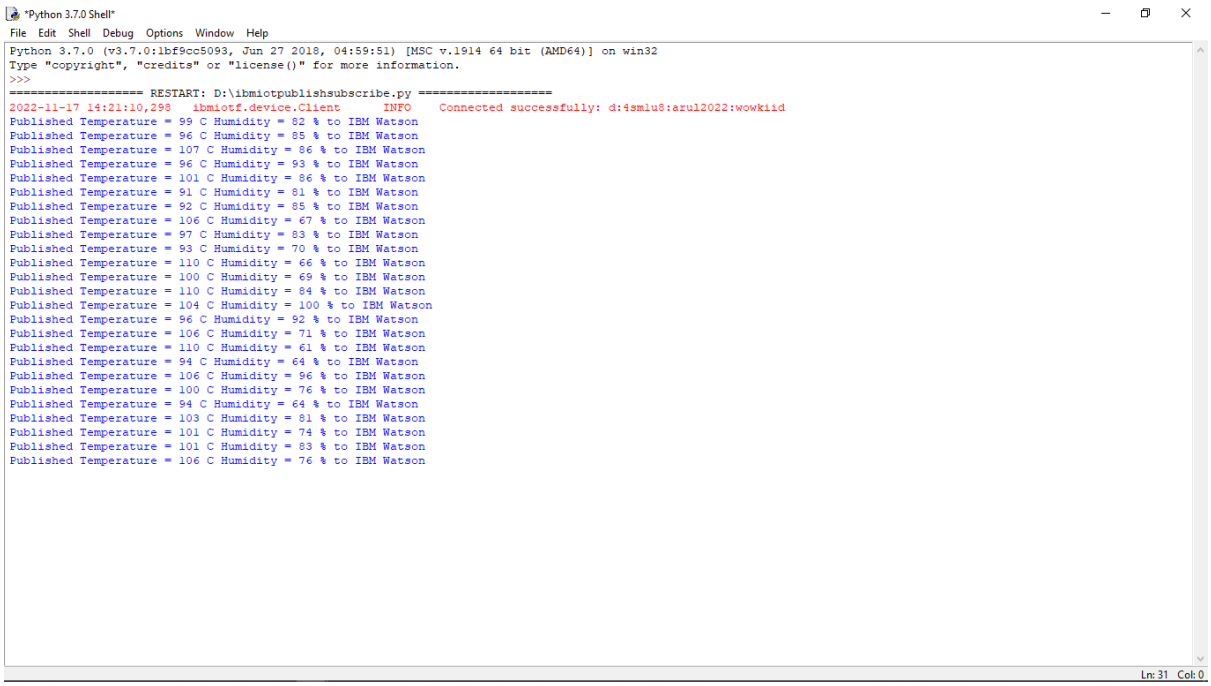
Date	19 September 2022
Team ID	PNT2022TMID45391
Project Name	Project-Industry-specific intelligent fire management system

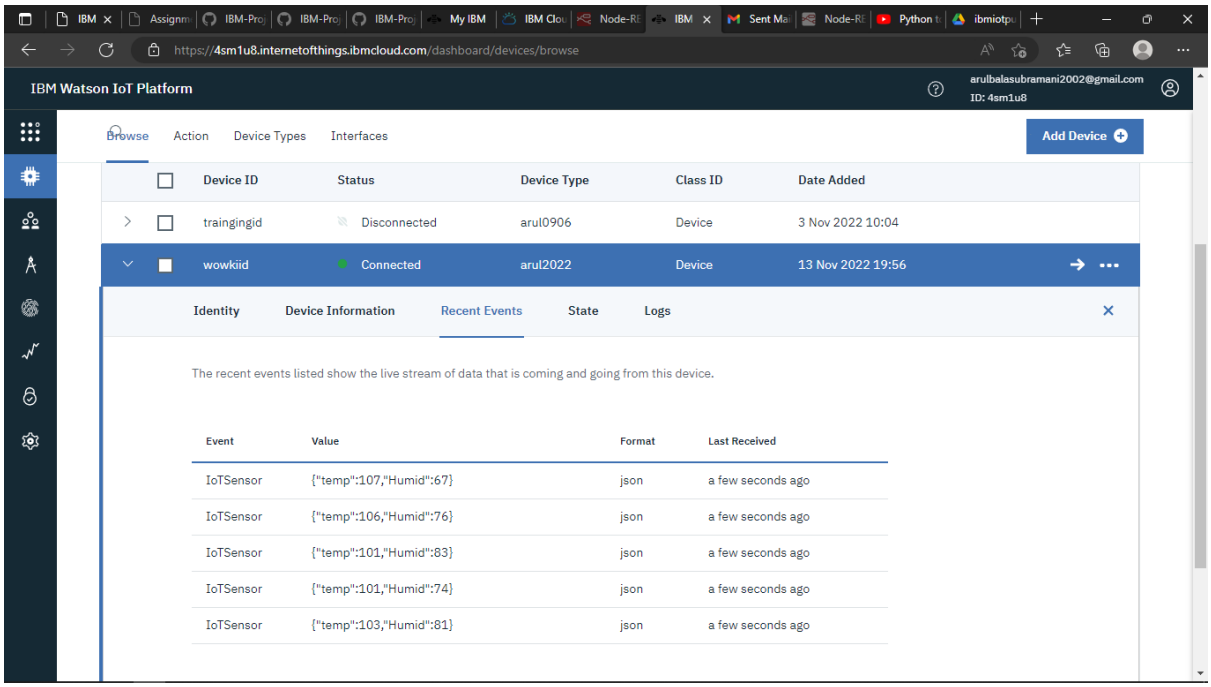
Publish data to the IBM cloud:

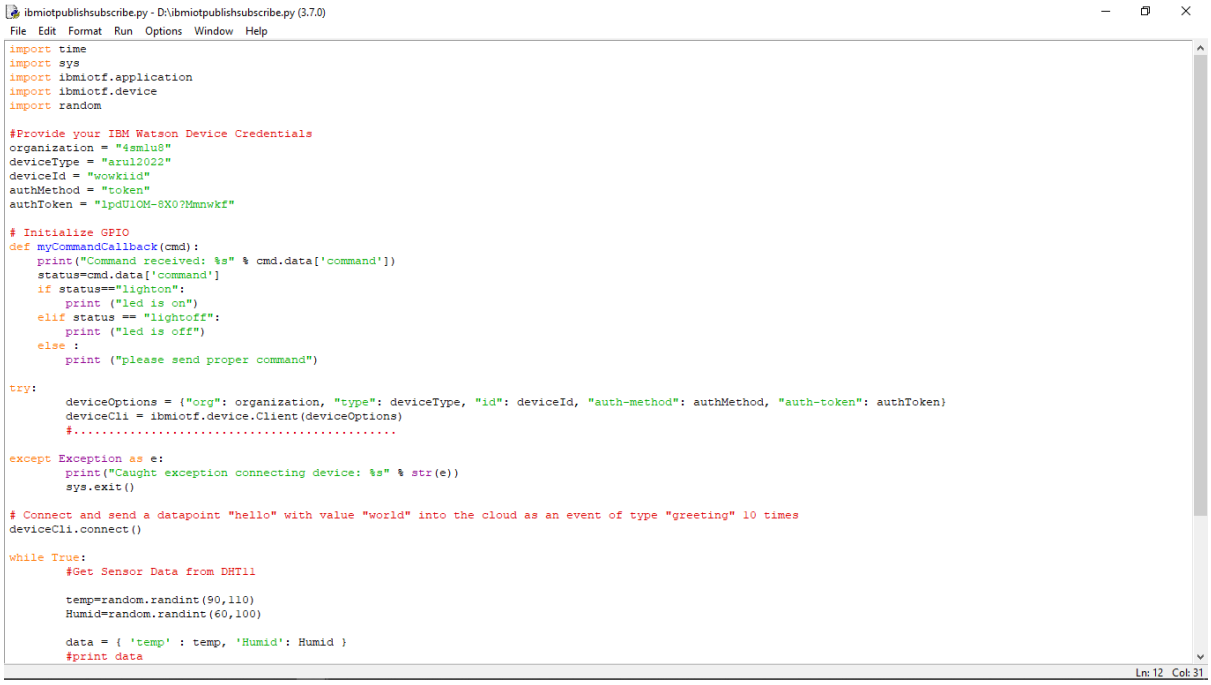
Program:

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random


#Provide your IBM Watson Device Credentials
organization = "4sm1u8"
deviceType = "arul2022"
deviceId = "wowkiid"
authMethod = "token"
authToken = "lpdU1OM-8X0?Mmnwkf"


# Initialize GPIO
def myCommandCallback(cmd):
   print("Command received: %s" % cmd.data['command'])
   status=cmd.data['command']
   if status=="lighton":
      print ("led is on")
   elif status == "lightoff":
      print ("led is off")
   else :
      print ("please send proper command")


try:
        deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method": authMethod, "auth-token": authToken}
        deviceCli = ibmiotf.device.Client(deviceOptions)
```

```
        #.....

except Exception as e:
        print("Caught exception connecting device: %s" % str(e))
        sys.exit()

# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type "greeting" 10 times
deviceCli.connect()

while True:
    #Get Sensor Data from DHT11

    temp=random.randint(90,110)
    Humid=random.randint(60,100)

    data = { 'temp' : temp, 'Humid': Humid }
    #print data
    def myOnPublishCallback():
      print ("Published Temperature = %s C" % temp, "Humidity = %s %%" % Humid, "to IBM Watson")
   success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0, on_publish=myOnPublishCallback)
    if not success:
      print("Not connected to IoTF")
    time.sleep(10)
     deviceCli.commandCallback = myCommandCallback
# Disconnect the device and application from the cloud
deviceCli.disconnect()
```


Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\ibmiotpublishsubscribe.py ==========
2022-11-17 14:21:10,298 ibmiotf.device.Client INFO Connected successfully: d:4sm1u8:arul2022:wowkiid
Published Temperature = 99 C Humidity = 82 % to IBM Watson
Published Temperature = 96 C Humidity = 85 % to IBM Watson
Published Temperature = 107 C Humidity = 86 % to IBM Watson
Published Temperature = 96 C Humidity = 93 % to IBM Watson
Published Temperature = 101 C Humidity = 86 % to IBM Watson
Published Temperature = 91 C Humidity = 81 % to IBM Watson
Published Temperature = 92 C Humidity = 85 % to IBM Watson
Published Temperature = 106 C Humidity = 67 % to IBM Watson
Published Temperature = 97 C Humidity = 83 % to IBM Watson
Published Temperature = 93 C Humidity = 70 % to IBM Watson
Published Temperature = 110 C Humidity = 66 % to IBM Watson
Published Temperature = 100 C Humidity = 69 % to IBM Watson
Published Temperature = 110 C Humidity = 84 % to IBM Watson
Published Temperature = 104 C Humidity = 100 % to IBM Watson
Published Temperature = 96 C Humidity = 92 % to IBM Watson
Published Temperature = 106 C Humidity = 71 % to IBM Watson
Published Temperature = 110 C Humidity = 61 % to IBM Watson
Published Temperature = 94 C Humidity = 64 % to IBM Watson
Published Temperature = 106 C Humidity = 96 % to IBM Watson
Published Temperature = 100 C Humidity = 76 % to IBM Watson
Published Temperature = 94 C Humidity = 64 % to IBM Watson
Published Temperature = 103 C Humidity = 81 % to IBM Watson
Published Temperature = 101 C Humidity = 74 % to IBM Watson
Published Temperature = 101 C Humidity = 83 % to IBM Watson
Published Temperature = 106 C Humidity = 76 % to IBM Watson
Ln: 31 Col: 0


https://4sm1u8.internetofthings.ibmcloud.com/dashboard/devices/browse
IBM Watson IoT Platform
arulbalasubramani2002@gmail.com
ID: 4sm1u8
Browse
Action
Device Types
Interfaces
Add Device
Device ID
Status
Device Type
Class ID
Date Added
traingingid
Disconnected
arul0906
Device
3 Nov 2022 10:04
wowkiid
Connected
arul2022
Device
13 Nov 2022 19:56
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
IoTSensor
{"temp":107,"Humid":67}
json
a few seconds ago
IoTSensor
{"temp":106,"Humid":76}
json
a few seconds ago
IoTSensor
{"temp":101,"Humid":83}
json
a few seconds ago
IoTSensor
{"temp":101,"Humid":74}
json
a few seconds ago
IoTSensor
{"temp":103,"Humid":81}
json
a few seconds ago


ibmiotpublishsubscribe.py - D:\ibmiotpublishsubscribe.py (3.7.0)
File Edit Format Run Options Window Help
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