Develop a python script

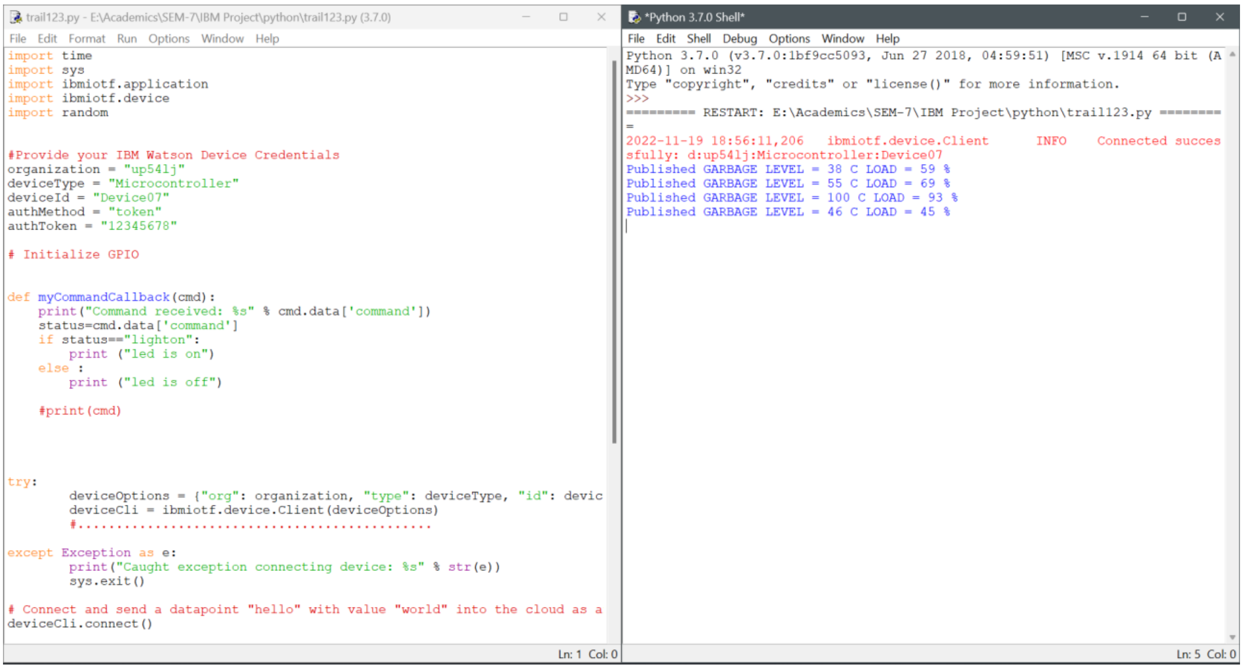
Team ID	PNT2022TMID14976
Project Name	Project :Smart Waste Management System for Metropolitan Cities

Step 1: Open python idle Step2: Type the program Step 3: Then click on file and save the document Step 4: Then click on Run then Run Module Step 5: output will be appeared in the idle window

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


#Provide your IBM Watson Device Credentials
organization = "up54lj"
deviceType = "Microcontroller"
deviceId = "Device07"
authMethod = "token"
authToken = "12345678"

# Initialize GPIO


def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="lighton":
        print ("led is on")
    else :
        print ("led is off")

    #print(cmd)
```

```
  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

          level=random.randint(0,100)
          load=random.randint(5,100)

          data = { 'level' : level, 'load': load }
          #print data
          def myOnPublishCallback():
             print ("Published GARBAGE LEVEL = %s C" % level, "LOAD = %s %%" %
  load)

          success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0,
  on_publish=myOnPublishCallback)
          if not success:
             print("Not connected to IoTF")
          time.sleep(2)

          deviceCli.commandCallback = myCommandCallback

  # Disconnect the device and application from the cloud
deviceCli.disconnect()
```

Screenshots Python script:



trail123.py - E:\Academics\SEM-7\IBM Project\python\trail123.py (3.7.0)
File Edit Format Run Options Window Help

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


#Provide your IBM Watson Device Credentials
organization = "up54lj"
deviceType = "Microcontroller"
deviceId = "Device07"
authMethod = "token"
authToken = "12345678"

# Initialize GPIO


def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="lighton":
        print ("led is on")
    else :
        print ("led is off")

    #print(cmd)




try:
        deviceOptions = {"org": organization, "type": deviceType, "id": devic
        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 a
deviceCli.connect()
```

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (A
MD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========= RESTART: E:\Academics\SEM-7\IBM Project\python\trail123.py ========
=
2022-11-19 18:56:11,206   ibmiotf.device.Client      INFO    Connected succes
sfully: d:up54lj:Microcontroller:Device07
Published GARBAGE LEVEL = 38 C LOAD = 59 %
Published GARBAGE LEVEL = 55 C LOAD = 69 %
Published GARBAGE LEVEL = 100 C LOAD = 93 %
Published GARBAGE LEVEL = 46 C LOAD = 45 %
```