

Develop a python script
Publish Data to the IBM Cloud

Date	12 September 2022
Team ID	PNT2022TMIDI08723
Project Name	Project - Signs with smart connectivity for Better road safety
Maximum Marks	4 Marks

Signs with smart connectivity for Better road safety

The screenshot displays the Spyder Python IDE interface. The left pane shows a Python script named 'untitled0.py' with the following code:

```
1 # -*- coding: utf-8 -*-
2 """
3 Created on Tue Nov 15 22:07:23 2022
4
5 @author: dokku
6 """
7
8 import requests
9
10 a="https://api.openweathermap.org/data/2.5/weather?q=chennai&appid=c86d26b0c4e7
11
12 r = requests.get(url = a)
13
14 data = r.json()
15
16 print(r)
17 print(data)
18
19 temp = data["main"]["temp"]
20
21 hum = data["main"]["humidity"]
22
23 print("Temperature is : ",temp)
24
25 print("Humidity is", hum)
26
```

The right pane shows the IPython console with the following output:

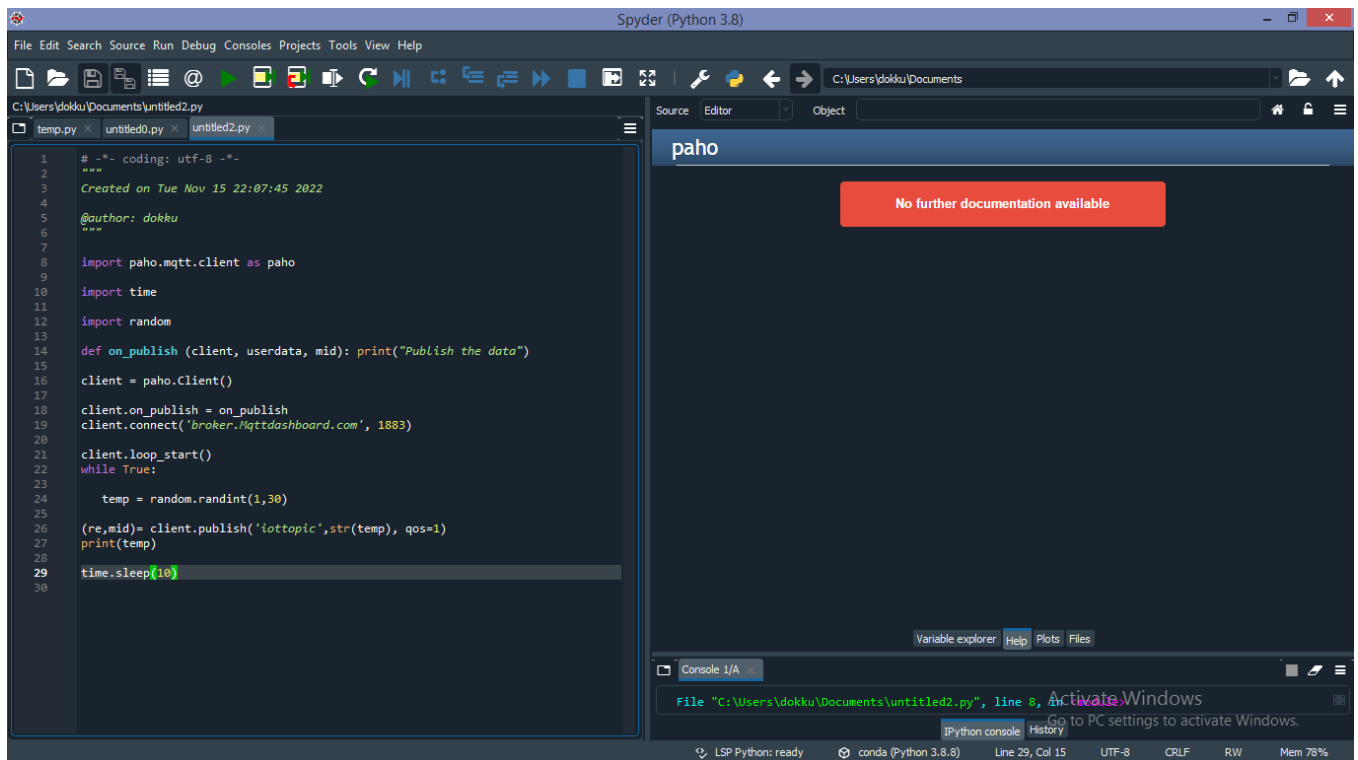
```
Python 3.8.0 (default, Apr 13 2021, 15:00:05) [AMD64]
Type "copyright", "credits" or "license()" for more information.

IPython 7.22.0 -- An enhanced Interactive Python.

In [1]:
In [1]: runfile('C:/Users/dokku/Desktop/untitled0.py', wdir='C:/Users/dokku/Desktop')
<Response [200]>
{'coord': {'lon': 80.2785, 'lat': 13.0878}, 'weather': [{'id': 701, 'main': 'Mist',
'description': 'mist', 'icon': '50n'}], 'base': 'stations', 'main': {'temp': 300.14,
'feels like': 303.15, 'temp_min': 300.14, 'temp_max': 300.14, 'pressure': 1013, 'humidity': 83},
'visibility': 3000, 'wind': {'speed': 1.54, 'deg': 30}, 'clouds': {'all': 40}, 'dt': 1668530240,
'sys': {'type': 1, 'id': 9218, 'country': 'IN', 'sunrise': 1668472661, 'sunset': 1668514163},
'timezone': 19800, 'id': 1264527, 'name': 'Chennai', 'cod': 200}
Temperature is : 300.14
Humidity is 83

In [2]:
```

The status bar at the bottom indicates 'LSP Python: ready', 'conda (Python 3.8.8)', 'Line 26, Col 1', 'UTF-8', 'CRLF', 'RW', and 'Mem 76%'.



Program :

#IBM Watson IOT Platform

#pip install wiotp-sdk

import wiotp.sdk.device

import time

import random

```

myConfig = {
    "identity": {
        "orgId": "hj5fmy",
        "typeId": "NodeMCU",
        "deviceId": "12345" },
    "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()

```