

Develop A Python Script To Publish And Subscribe To IBM IoT Platform

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Project Name	Project - SmartFarmer - IoT Enabled Smart Farming Application

Python Code:

```
#IBM Watson IOT Platform

#pip install wiotp-sdk

import wiotp.sdk.device

import time

import random

import requests

import json

myConfig = {

    "identity": {

        "orgId": "drhkpn",

        "typeId": "Smart-Farmer",

        "deviceId": "9192"

    },

    "auth": {

        "token": "SO_kL5!_ *299@q6i4r"

    }

}

def myCommandCallback(cmd):
```

```

if(cmd.data['firstlight']=="on"):

    print("-----Light 1 is ON-----")

else:

    print("-----Light 1 is OFF-----")

'''

if(cmd.data['secondlight']=="Second Light ON"):

    print("-----Light 2 is ON-----")

else:

    print("-----Light 2 is OFF-----")

if(cmd.data['motor']=="Motor ON"):

    print("-----Motor is ON-----")

else:

    print("-----Motor is OFF-----")

'''

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)

client.connect()

while(True):

    weatherdata =
requests.get('https://api.openweathermap.org/data/2.5/weather?q=Chennai&appid=3942dd61b26410
206c466575e5addfbf')

    a=weatherdata.text

    b=json.loads(a) # Class after import json

    c=(b["main"]["temp"]-273.15)

    d=(b["main"]["humidity"])

    myData={'temp':c, 'humid':d}

    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)

```

```
print("Published data Successfully: %s", myData)

client.commandCallback = myCommandCallback

time.sleep(2)

print()

client.disconnect()
```