Develop a python script

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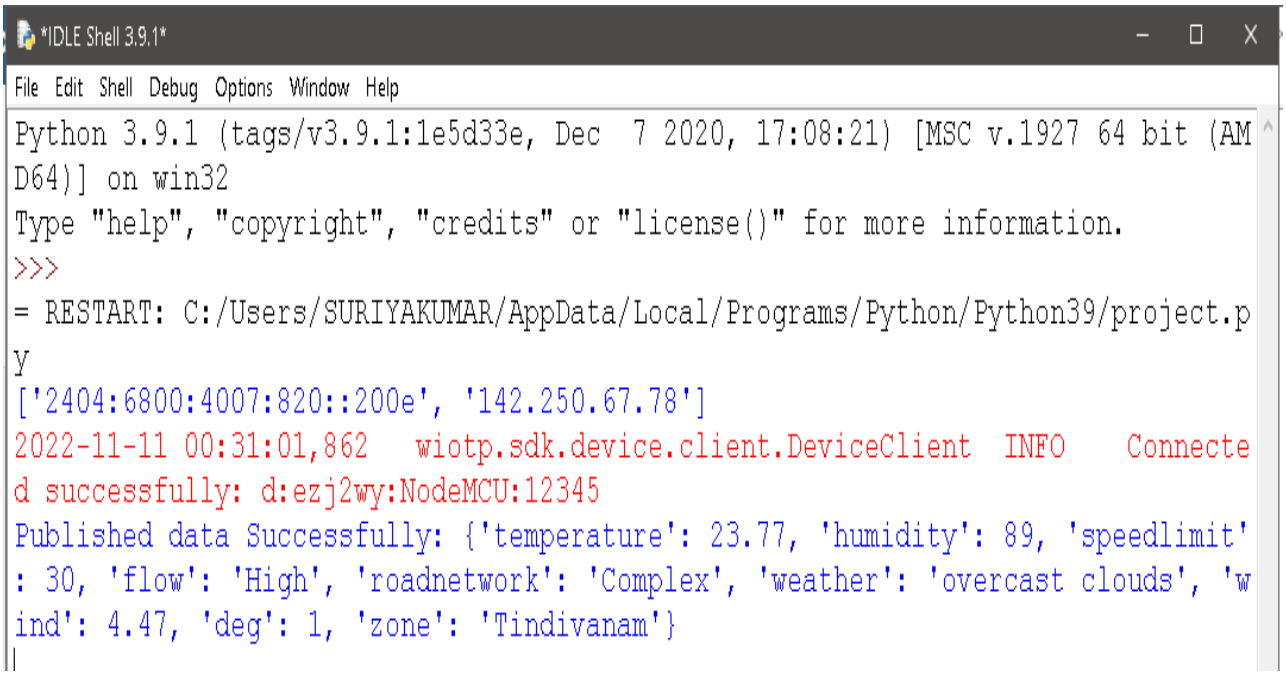
Code for data publishing to IBM cloud

```
#IBM Watson IOT Platform

#pip install wiotp-sdk

import wiotp.sdk.device

import requests

import json

import time

import random

myConfig = {

    "identity": {

        "orgId": "ezj2wy",

        "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)


weatherData=requests.get('https://api.openweathermap.org/data/2.5/weather?q=Tindivanam,%20IN&appid=b9ea1b67bfacecec3182f4826b5ba06c')

    a=weatherData.text

    data=json.loads(a)

    temp=round((data["main"]["temp"]-273.15),2)

    hum=(data["main"]["humidity"])

    ws=(data["wind"]["speed"])

    deg=(data["wind"]["deg"])

    p=(data['weather'])

                        #weather=(p[0]['main'])

    desc=(p[0]['description'])

    name=(data['name'])



    n=random.randint(1,3)

    if((temp<28)&(hum>45)):

        speed=30

    elif((temp<40)&(hum<42)):

        speed=40

    elif((temp<32)&(hum<51)):

        speed=60
```

```
        else:
            speed=50


        # r=random.uniform(0.0,10.0)


        if(n==1):
            flow="Normal"
            rn="Simple"
        elif(n==2):
            flow="Medium"
            rn="Moderate"
        else:
            flow="High"
            rn="Complex"
        myData={'temperature':temp, 'humidity':hum, 'speedlimit':speed,\
                'flow':flow,'roadnetwork':rn,'weather':desc,'wind':ws,\
                'deg':deg,'zone':name}
        client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
        print("Published data Successfully:", myData)
        client.commandCallback = myCommandCallback
        time.sleep(2)
    client.disconnect()
```

OutPut :


IDLE Shell 3.9.1
File Edit Shell Debug Options Window Help
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/SURIYAKUMAR/AppData/Local/Programs/Python/Python39/project.py
['2404:6800:4007:820::200e', '142.250.67.78']
2022-11-11 00:31:01,862 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:ezj2wy:NodeMCU:12345
Published data Successfully: {'temperature': 23.77, 'humidity': 89, 'speedlimit': 30, 'flow': 'High', 'roadnetwork': 'Complex', 'weather': 'overcast clouds', 'wind': 4.47, 'deg': 1, 'zone': 'Tindivanam'}