

PUBLISH DATA TO THE IBM CLOUD

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| Team ID | PNT2022TMID30708 |
| Project Name | Signs With Smart Connectivity for Better Road Safety |

Publish Data To The IBM Cloud:

Python code is used to send random sensor data to the cloud and also to receive commands from the cloud.

Below is the reference link provided for the python program to publish and subscribe from the IBM Watson IoT Platform.

PYTHON CODE :

ibm.py - C:\Users\91994\OneDrive\Desktop\ibm.py (3.7.0)

File Edit Format Run Options Window Help

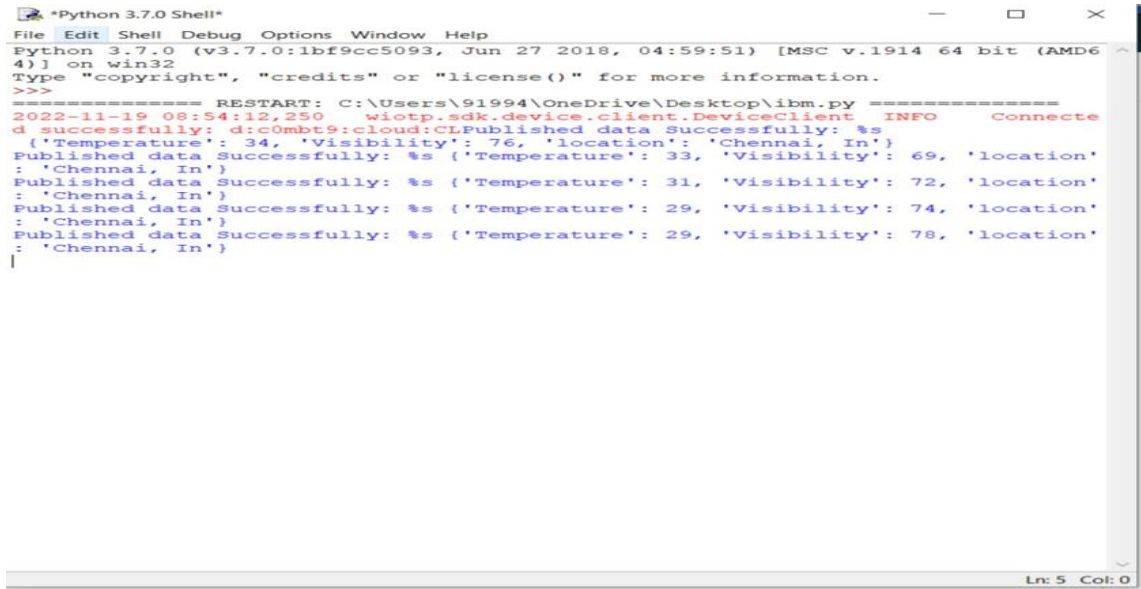
```
import wiotp.sdk.device
import time
from random import randint as ri
myConfig = {
    "identity": {
        "orgId": ":",
        "typeId": "cloud",
        "deviceId": "CL"
    },
    "auth": {
        "token": " "
    }
}

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:
    myData={"Temperature":ri(28,35), "Visibility":ri(56,79), "location":"Chennai, In"}
    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()
```

PYTHON SHELL OUTPUT :

A screenshot of a Python 3.7.0 Shell window. The window has a title bar with a Python icon and the text '*Python 3.7.0 Shell*'. Below the title bar is a menu bar with 'File', 'Edit', 'Shell', 'Debug', 'Options', 'Window', and 'Help'. The main area shows the output of a script. It starts with a restart message, followed by a timestamp and a log entry for a successful connection. Then, it shows four log entries for successfully published data, each with a timestamp and a dictionary of sensor data (Temperature, Visibility, location). The status bar at the bottom right shows 'Ln: 5 Col: 0'.

```
*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: C:\Users\91994\OneDrive\Desktop\libm.py =====
2022-11-19 08:54:12,250 wiotp.sdk.device.client.DeviceClient INFO Connecte
d successfully: d:c0mbt9:cloud:CLPublished data Successfully: %s
({'Temperature': 34, 'Visibility': 76, 'location': 'Chennai, In'})
Published data Successfully: %s {'Temperature': 33, 'Visibility': 69, 'location'
: 'Chennai, In'}
Published data Successfully: %s {'Temperature': 31, 'Visibility': 72, 'location'
: 'Chennai, In'}
Published data Successfully: %s {'Temperature': 29, 'Visibility': 74, 'location'
: 'Chennai, In'}
Published data Successfully: %s {'Temperature': 29, 'Visibility': 78, 'location'
: 'Chennai, In'}
|
Ln: 5 Col: 0
```