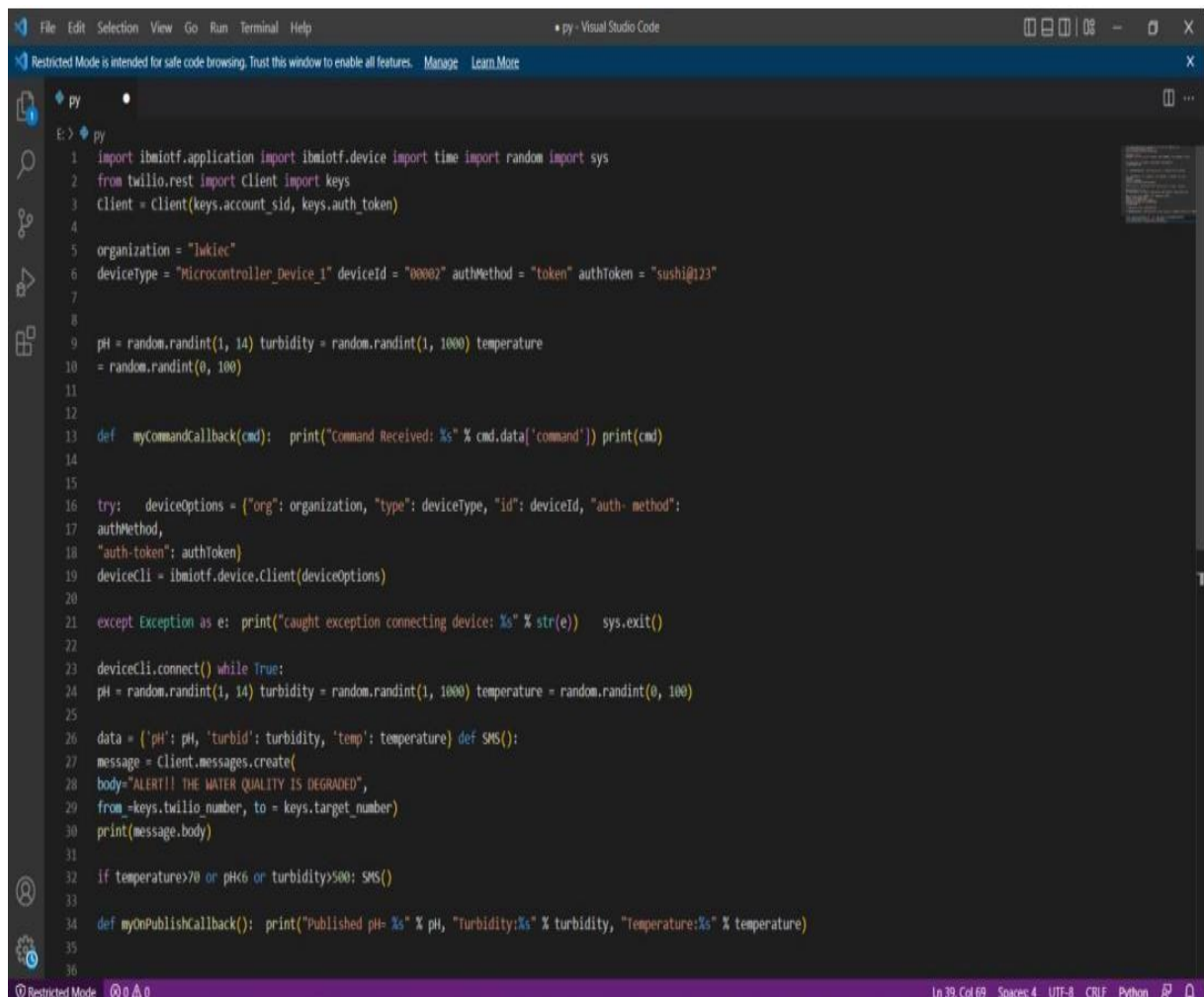


PUBLISH DATA TO THE IBM CLOUD

TEAM ID	PNT2022TMID23839
Project Name	REAL-TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM
Leader Name	ASHA BAI M
Team Members Name	GEETHASREE S KEERTHIGA P GOWRI S R



```
File Edit Selection View Go Run Terminal Help • py - Visual Studio Code
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More

py
E:\> py
1 import ibmiotf.application import ibmiotf.device import time import random import sys
2 from twilio.rest import Client import keys
3 client = Client(keys.account_sid, keys.auth_token)
4
5 organization = "Iwkiec"
6 deviceType = "Microcontroller_Device_1" deviceId = "00002" authMethod = "token" authToken = "sushi@123"
7
8
9 pH = random.randint(1, 14) turbidity = random.randint(1, 1000) temperature
10 = random.randint(0, 100)
11
12
13 def myCommandCallback(cmd): print("Command Received: %s" % cmd.data['command']) print(cmd)
14
15
16 try: deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method":
17 authMethod,
18 "auth-token": authToken}
19 deviceCli = ibmiotf.device.Client(deviceOptions)
20
21 except Exception as e: print("caught exception connecting device: %s" % str(e)) sys.exit()
22
23 deviceCli.connect() while True:
24 pH = random.randint(1, 14) turbidity = random.randint(1, 1000) temperature = random.randint(0, 100)
25
26 data = {'pH': pH, 'turbid': turbidity, 'temp': temperature} def SMS():
27 message = Client.messages.create(
28 body="ALERT!! THE WATER QUALITY IS DEGRADED",
29 from_=keys.twilio_number, to = keys.target_number)
30 print(message.body)
31
32 if temperature>70 or pH<6 or turbidity>500: SMS()
33
34 def myOnPublishCallback(): print("Published pH= %s" % pH, "Turbidity:%s" % turbidity, "Temperature:%s" % temperature)
35
36
```

Test_Python_3.7.4Test_python_3.7.4.pyTest_python_3.7.4Test_python_3.7.4

Project

Test_Python_3.7.4PycharmProjects/Test_Pyth
d_hwlec_Microcontroller_Device_1_00002.log
main.py
Test_python_3.7.4.py
External Libraries
Scratches and Consoles

Test_python_3.7.4.py

42pH = random.r
43turbidity = random.randint(1,
44temperature = random.randint(0,
45
46data = {'pH': pH, 'turbid': tur
47
48
49# print(data)
50def myOnPublishCallback():
while True

Run: Test_python_3.7.4

Published pH= 4 Turbidity:242 Temperature:71
Published pH= 12 Turbidity:564 Temperature:54
Published pH= 2 Turbidity:571 Temperature:98
Published pH= 7 Turbidity:677 Temperature:65
Published pH= 8 Turbidity:352 Temperature:13
Published pH= 5 Turbidity:862 Temperature:88
Published pH= 3 Turbidity:934 Temperature:7
Published pH= 9 Turbidity:213 Temperature:89
Published pH= 14 Turbidity:677 Temperature:22
Published pH= 11 Turbidity:292 Temperature:160
Published pH= 2 Turbidity:53 Temperature:21
Published pH= 6 Turbidity:409 Temperature:69
Published pH= 11 Turbidity:238 Temperature:26
Published pH= 2 Turbidity:443 Temperature:43
Published pH= 6 Turbidity:986 Temperature:91
Published pH= 5 Turbidity:593 Temperature:85
Published pH= 14 Turbidity:308 Temperature:86
Published pH= 4 Turbidity:532 Temperature:8
Published pH= 3 Turbidity:51 Temperature:8

IBM Watson IoT Platform

Browse

Action

Device Types

Interfaces

Add Device

The recent events listed show the live stream of data that is coming an

Event	Value
demo	("pH":12,"turbid":93,"temp":87)
demo	("pH":7,"turbid":873,"temp":94)
demo	("pH":3,"turbid":204,"temp":19)
demo	("pH":11,"turbid":304,"temp":77)
demo	("pH":13,"turbid":16,"temp":50)

>

☐

00003

Disconnected

Micro_controller_2

Devi

Items per page 50 | 1-3 of 3 items 1 of 1 page