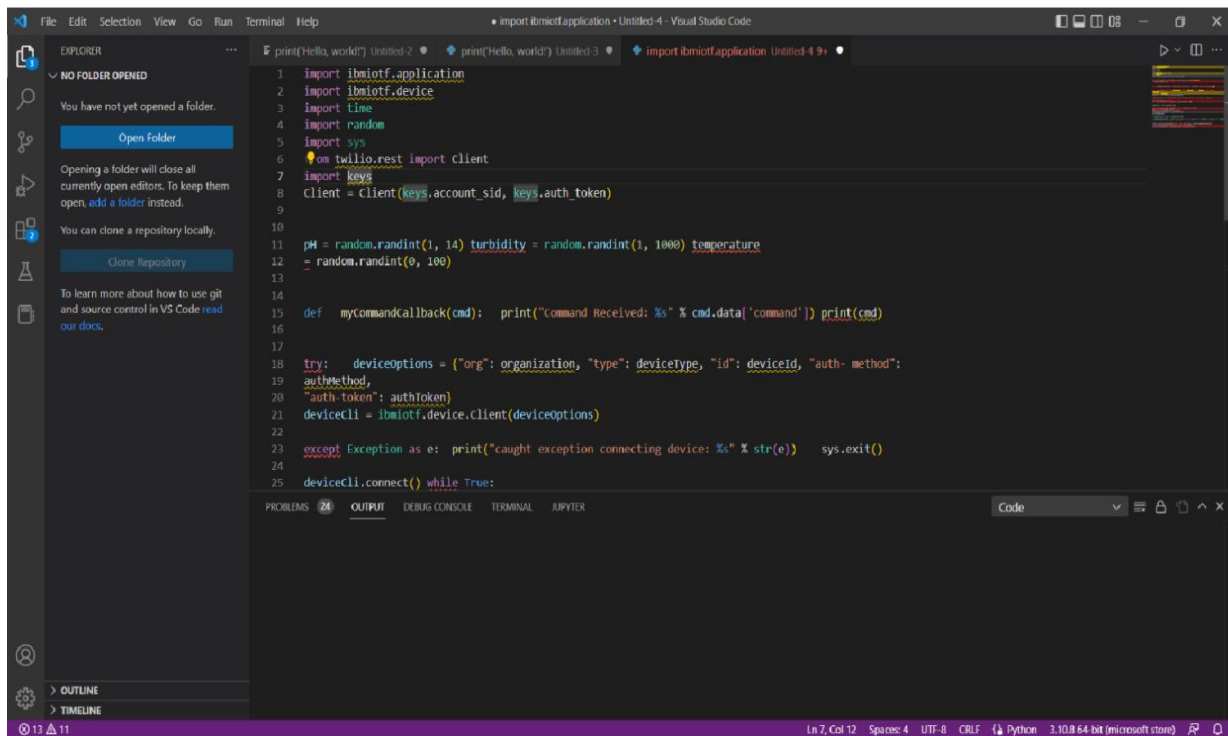


SIMULATION OUTPUT

TEAM ID	PNT2022TMID23838
Project Name	REAL-TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM
Leader Name	BHUVANESHWARI SRIDHAR S
Team Members Name	BAVANI P DIVEDHA V KAVIYARASI P



The screenshot displays the Visual Studio Code interface with a Python script titled 'import ibmiotfApplication - Untitled-4'. The script is a simulation for an IoT application, featuring imports for 'ibmiotf', 'twilio', and 'sys'. It defines a 'myCommandCallback' function that prints received commands and a 'devicecli' object. The main logic includes a loop that generates random data for pH, turbidity, and temperature, and a 'while True' loop for connecting the device client.

```
1 import ibmiotfApplication
2 import ibmiotf.device
3 import time
4 import random
5 import sys
6 from twilio.rest import Client
7 import keys
8 client = Client(keys.account_sid, keys.auth_token)
9
10
11 pH = random.randint(1, 14) turbidity = random.randint(1, 1000) temperature
12 = random.randint(0, 100)
13
14
15 def myCommandCallback(cmd): print("Command Received: %s" % cmd.data['command']) print(cmd)
16
17
18 try: deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method":
19 authMethod,
20 "auth-token": authToken}
21 devicecli = ibmiotf.device.Client(deviceOptions)
22
23 except Exception as e: print("caught exception connecting device: %s" % str(e)) sys.exit()
24
25 devicecli.connect() while True:
```

The status bar at the bottom indicates the file is at line 7, column 12, using UTF-8 encoding, CRLF line endings, and Python 3.10.8 64-bit (microsoft store).

```
Run: Test_python_3.7.4
Published pH= 5 Turbidity:36 Temperature:79
Published pH= 2 Turbidity:311 Temperature:92
Published pH= 4 Turbidity:420 Temperature:10
Published pH= 13 Turbidity:655 Temperature:76
Published pH= 2 Turbidity:991 Temperature:2
Published pH= 3 Turbidity:521 Temperature:77
Published pH= 11 Turbidity:565 Temperature:65
Published pH= 14 Turbidity:914 Temperature:23
Published pH= 2 Turbidity:190 Temperature:18
Command Received: Lighton
Led is on
Command Received: Lighton
Led is on
Command Received: Lighton
Led is on
Published pH= 13 Turbidity:641 Temperature:70
Command Received: Lighton
Led is on
Published pH= 2 Turbidity:907 Temperature:7
Published pH= 7 Turbidity:343 Temperature:67
Published pH= 11 Turbidity:41 Temperature:69
Published pH= 2 Turbidity:30 Temperature:45
Published pH= 3 Turbidity:940 Temperature:39
Published pH= 2 Turbidity:114 Temperature:27
Published pH= 5 Turbidity:936 Temperature:0
Published pH= 14 Turbidity:524 Temperature:1
Published pH= 11 Turbidity:605 Temperature:12
Version Control Run TODO Problems Python Packages Python Console Terminal Event Log
3831 LF UTF-8 4 spaces Python 3.7
```

```
Run: Test_python_3.7.4
Published pH= 6 Turbidity:699 Temperature:60
Published pH= 13 Turbidity:364 Temperature:70
Published pH= 10 Turbidity:629 Temperature:93
Published pH= 6 Turbidity:96 Temperature:79
Command Received: Lightoff
Led is off
Command Received: Lightoff
Led is off
Command Received: Lightoff
Led is off
Published pH= 13 Turbidity:517 Temperature:28
Published pH= 3 Turbidity:561 Temperature:20
Published pH= 9 Turbidity:407 Temperature:34
Published pH= 11 Turbidity:858 Temperature:61
Published pH= 1 Turbidity:719 Temperature:86
Published pH= 14 Turbidity:604 Temperature:48
Published pH= 9 Turbidity:79 Temperature:75
Published pH= 13 Turbidity:500 Temperature:76
Command Received: Lightoff
Led is off
Command Received: Lightoff
Led is off
Published pH= 3 Turbidity:306 Temperature:11
Published pH= 6 Turbidity:837 Temperature:72
Published pH= 11 Turbidity:389 Temperature:61
Published pH= 7 Turbidity:886 Temperature:11
Published pH= 4 Turbidity:648 Temperature:20
Version Control Run TODO Problems Python Packages Python Console Terminal Event Log
4115 LF UTF-8 4 spaces Python 3.7
```