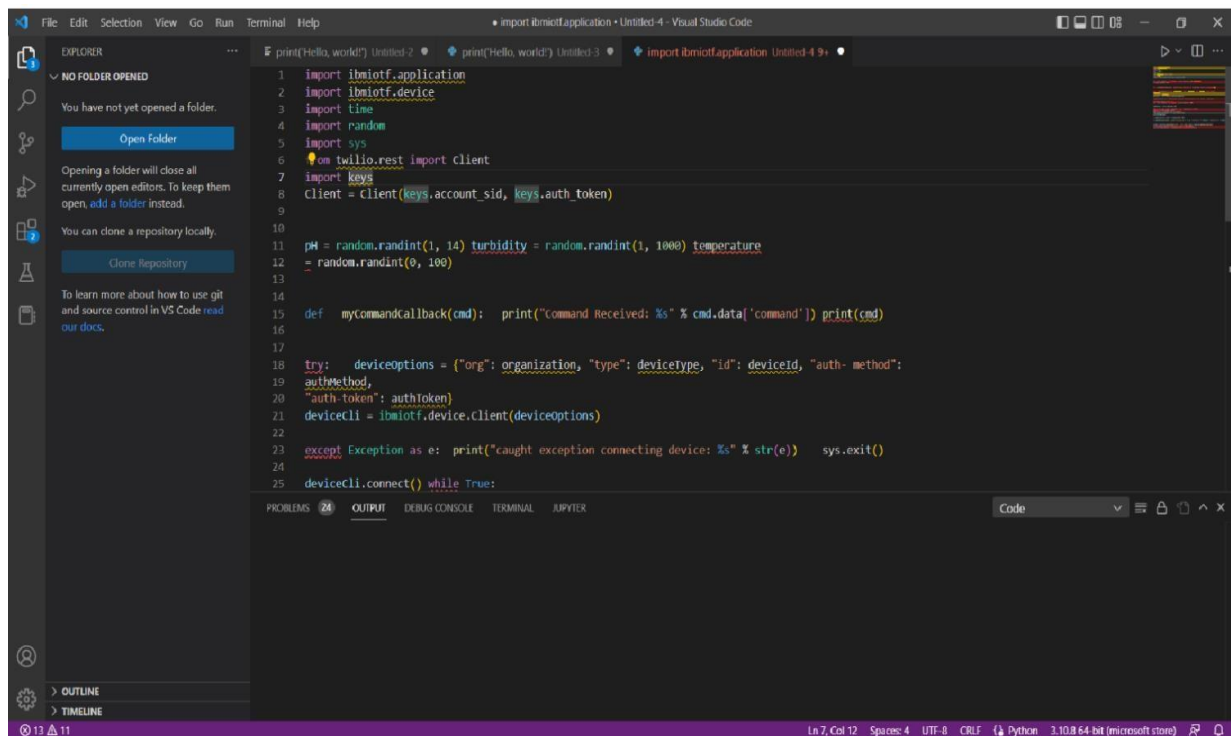


SIMULATION OUTPUT

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



The screenshot displays the Visual Studio Code interface with a Python script titled 'import ibmiotfApplication - Untitled-4'. The script is designed to simulate an IoT device using the IBM IoT Platform SDK. It includes imports for the SDK, time, random, and sys modules. A Tello drone is simulated as an IoT device using the 'tello.rest' module. The script sets up a client with account and authentication tokens, generates random data for pH, turbidity, and temperature, and implements a callback function to handle incoming commands. It also includes a try-except block for device connection and a continuous loop to maintain the connection.

```
1 import ibmiotf.application
2 import ibmiotf.device
3 import time
4 import random
5 import sys
6 from tello.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:
```

```
Run: Test_python_3.7.4
Published pH= 5 Turbidity:36 Temperature:79
Published pH= 2 Turbidity:311 Temperature:92
Published pH= 4 Turbidity:428 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:987 Temperature:7
Published pH= 7 Turbidity:343 Temperature:67
Published pH= 11 Turbidity:41 Temperature:69
Published pH= 2 Turbidity:38 Temperature:45
Published pH= 3 Turbidity:948 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:685 Temperature:12
Version Control Run TODO Problems Python Packages Python Console Terminal Event Log
36X.1 1.8 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:95 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:51
Published pH= 1 Turbidity:719 Temperature:86
Published pH= 14 Turbidity:684 Temperature:48
Published pH= 9 Turbidity:79 Temperature:75
Published pH= 13 Turbidity:588 Temperature:76
Command Received: Lightoff
Led is off
Command Received: Lightoff
Led is off
Published pH= 3 Turbidity:386 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