SPRINT 2:

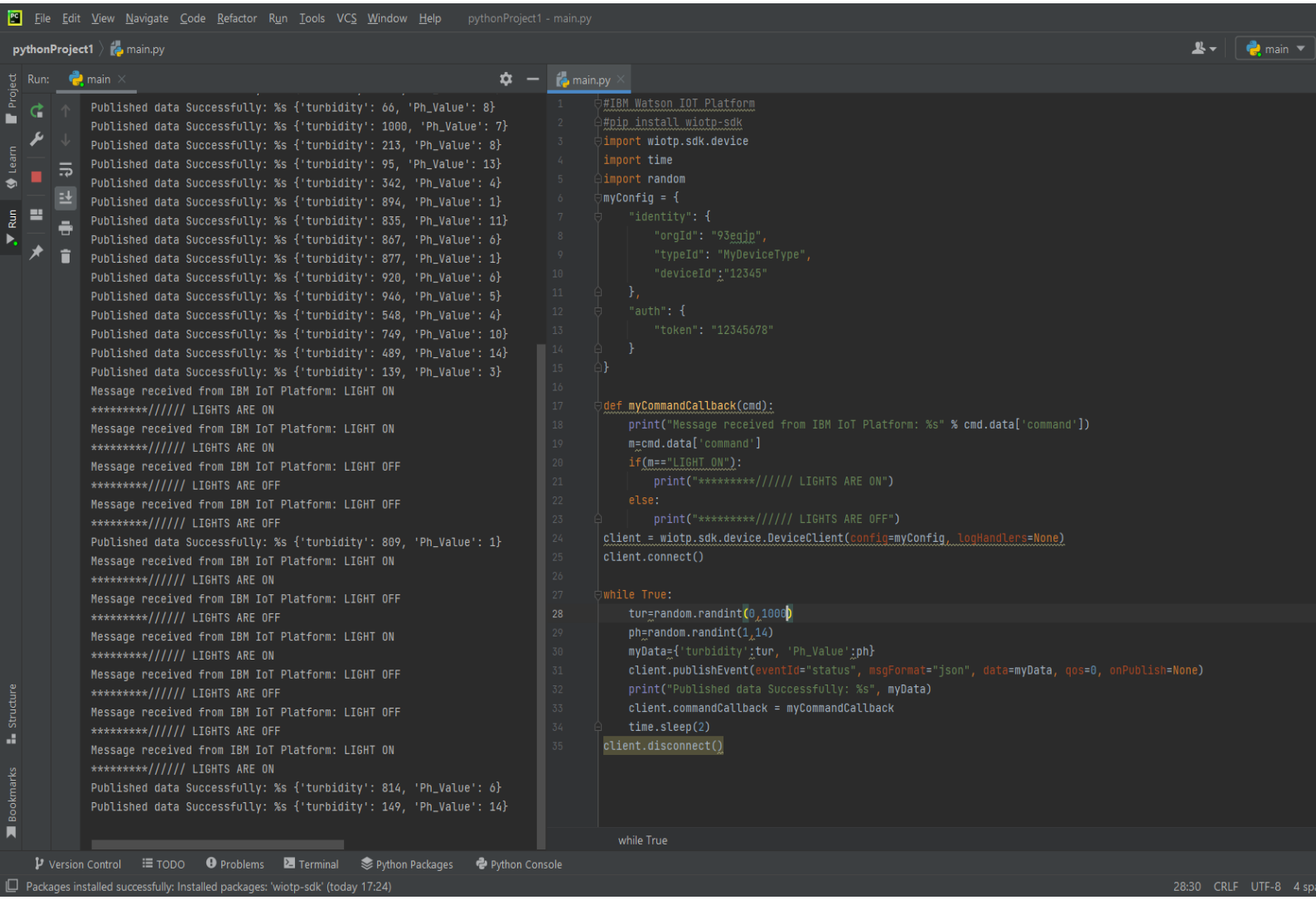
Date	17th November 2022
Team ID	PNT2022TMID15034
Project Name	IOT Based Real-Time River Water Quality Monitoring and Control System
Maximum Marks	4 Mark

Python Code :

```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "93eqjp",
        "typeId": "MyDeviceType",
        "deviceId":"12345"
    },
    "auth": {
        "token": "12345678"
    }
}
```

```
def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" %
cmd.data['command'])
    m=cmd.data['command']
    if(m=="LIGHT ON"):
        print("*********////// LIGHTS ARE ON")
    else:
        print("*********////// LIGHTS ARE OFF")
client = wiotp.sdk.device.DeviceClient(config=myConfig,
logHandlers=None)
client.connect()


while True:
    tur=random.randint(0,1000)
    ph=random.randint(1,14)
    myData={'turbidity':tur, 'Ph_Value':ph}
    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()
```


File Edit View Navigate Code Refactor Run Tools VCS Window Help pythonProject1 - main.py
pythonProject1 main.py
main
Run: main
main.py
Published data Successfully: %s {'turbidity': 66, 'Ph_Value': 8}
Published data Successfully: %s {'turbidity': 1000, 'Ph_Value': 7}
Published data Successfully: %s {'turbidity': 213, 'Ph_Value': 8}
Published data Successfully: %s {'turbidity': 95, 'Ph_Value': 13}
Published data Successfully: %s {'turbidity': 342, 'Ph_Value': 4}
Published data Successfully: %s {'turbidity': 894, 'Ph_Value': 1}
Published data Successfully: %s {'turbidity': 835, 'Ph_Value': 11}
Published data Successfully: %s {'turbidity': 867, 'Ph_Value': 6}
Published data Successfully: %s {'turbidity': 877, 'Ph_Value': 1}
Published data Successfully: %s {'turbidity': 920, 'Ph_Value': 6}
Published data Successfully: %s {'turbidity': 946, 'Ph_Value': 5}
Published data Successfully: %s {'turbidity': 548, 'Ph_Value': 4}
Published data Successfully: %s {'turbidity': 749, 'Ph_Value': 10}
Published data Successfully: %s {'turbidity': 489, 'Ph_Value': 14}
Published data Successfully: %s {'turbidity': 139, 'Ph_Value': 3}
Message received from IBM IoT Platform: LIGHT ON
*********////// LIGHTS ARE ON
Message received from IBM IoT Platform: LIGHT ON
*********////// LIGHTS ARE ON
Message received from IBM IoT Platform: LIGHT OFF
*********////// LIGHTS ARE OFF
Message received from IBM IoT Platform: LIGHT OFF
*********////// LIGHTS ARE OFF
Published data Successfully: %s {'turbidity': 809, 'Ph_Value': 1}
Message received from IBM IoT Platform: LIGHT ON
*********////// LIGHTS ARE ON
Message received from IBM IoT Platform: LIGHT OFF
*********////// LIGHTS ARE OFF
Message received from IBM IoT Platform: LIGHT ON
*********////// LIGHTS ARE ON
Message received from IBM IoT Platform: LIGHT OFF
*********////// LIGHTS ARE OFF
Message received from IBM IoT Platform: LIGHT OFF
*********////// LIGHTS ARE OFF
Message received from IBM IoT Platform: LIGHT ON
*********////// LIGHTS ARE ON
Published data Successfully: %s {'turbidity': 814, 'Ph_Value': 6}
Published data Successfully: %s {'turbidity': 149, 'Ph_Value': 14}
#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time
import random
myConfig = {
"identity": {
"orgId": "93eqjp",
"typeId": "MyDeviceType",
"deviceId":"12345"
},
"auth": {
"token": "12345678"
}
}
def myCommandCallback(cmd):
print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
m=cmd.data['command']
if(m=="LIGHT ON"):
print("*********////// LIGHTS ARE ON")
else:
print("*********////// LIGHTS ARE OFF")
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
while True:
tur=random.randint(0,1000)
ph=random.randint(1,14)
myData={'turbidity':tur, 'Ph_Value':ph}
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()
while True
Version Control TODO Problems Terminal Python Packages Python Console
Packages installed successfully: Installed packages: 'wiotp-sdk' (today 17:24)
28:30 CRLF UTF-8 4 sp

PUBLISH DATA TO IBM CLOUD: