TITLE : REAL TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM

TEAM ID : PNT2022TMID27339

DEVELOP A PYTHON SCRIPT

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.

CODE

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

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:

    temp=random.randint(-20,125)

    hum=random.randint(0,100)

    turbidity = random.randit(0,100)

    myData={'temperature':temp, 'humidity':hum, 'turbidity' :turbidity}

    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()
```