

<b>Date</b>	11 <sup>th</sup> november 2022
<b>Team ID</b>	PNT2022TMID10102
<b>Project Name</b>	Real-time River Water Quality Monitoring System
<b>Maximum Marks</b>	2 Marks

## Develop a python code for publishing random sensor data to the IBM IoT Platform:

```
import wiotp.sdk.device import time import os import datetime import random
```

```
myConfig = {
```

```
"identity": {
```

```
"orgId": "hjSfmy",
```

```
"typeId": "NodeMCU
```

```
", "deviceId": "12345"
```

```
},
```

```
"auth": {
```

```
"token": "12345678"
```

```
}
```

```
}
```

```
client = wiotp.sdk.device.DeviceClient (config=myConfig, logHandlers=None) client.connect ()
```

```
def myCommandCallback (cmd) : print ("Message received from IBM IoT Platform: %s" %
cmd.data['command']) m=cmd.data['command'] if (m=="motoron"): print ("Motor is switched on")
elif (m=="motoroff"):
print ("Motor is switched OFF")
print (" ")
while True: sen=random.randint (0,100) temp=random.randint (-20, 125) hum=random.randint (0,
100)
myData={'sensor value ': sen,'temperature':temp, 'humidity':hum}
client.publishEvent (eventId="status", msgFormat="json", data=myData, qos=0 , onPublish=None)
print ("Published data Successfully: %s", myData) time.sleep (2)
client.commandCallback = myCommandCallback client.disconnect ()
```

main.py

```
1 import wiotp.sdk.device import time
2 import os import datetime import random myConfig = {
3     "identity": {
4         "orgId": "hjsfmy", "typeId": "NodeMCU", "deviceId": "12345"
5     },
6     "auth": {
7         "token": "12345678"
8     }
9 }
10 client = wiotp.sdk.device.DeviceClient (config=myConfig, logHandlers=None) client.connect ()
11
12 def myCommandCallback (cmd) :
13     print ("Message received from IBM IoT Platform: %s" % cmd.data['command']) m=cmd.data['command']
14     if (m=="motoron"):
15         print ("Motor is switched on") elif (m=="motoroff"):
16             print ("Motor is switched OFF") print (" ")
17     while True: sen=random.randint (0,100)
18     temp=random.randint (-20, 125)
19     hum=random.randint (0, 100)
20     myData={'sensor value ': sen,'temperature':temp, 'humidity':hum}
21     client.publishEvent (eventId="status", msgFormat="json", data=myData, qos=0 , onPublish=None)
22     print ("Published data Successfully: %s", myData)
23     time.sleep (2)
24     client.commandCallback = myCommandCallback client.disconnect ()
```

Thus the assigned task for developing a python code for publishing random Sensor data to the ibm iot platform is completed sucessfully