

## FINAL CODE

TEAM ID	PNT2022MID17430
PROJECT TITLE	Hazardous area monitoring for industrial plant powered by IoT
DATE	16-11-2022

### ALGORITHM:

1. Start
2. Import 3 modules
3. Create the IBM IoT platform device
4. Give device id
5. Connect the device
6. Introducing my command call back function
7. Get a random temperature and humidity values
8. Loop infinitely
9. Print the random temperature and humidity values on console
10. Publish the values to IBM Watson IoT platform
11. Stop

### SOURCE CODE:

#connecting the python to IBM watson IoT platform

```
import wiotp.sdk.device
```

```
import time
```

```
import random
```

```
myconfig = {
```

```
    "identity":{
```

```
        "orgId":"zvvqaf",
```

```
        "typeId":"IoT_devices",
```

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

```
    },
```

```
    "auth":{
```

```
        "token":"qagOTm?(qV+deBQ*j*"
```

```
    }
```

```
}
```

```

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)

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

    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()

```

```

code.py - C:\Users\asus\AppData\Local\Programs\Python\Python39\code.py (3.9.6)
File Edit Format Run Options Window Help
#Connecting the python to IBM watson IoT platform
import wiotp.sdk.device
import time
import random
myconfig = {
    "identity":{
        "orgId":"avvqad",
        "typeId":"IoT_devices",
        "deviceId":"i2345",
    },
    "auth":{
        "token":"qagOTm?(qV+deBQ?)"
    }
}
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)
    myData={'temperature':temp, 'humidity':hum}
    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()

```

**Fig. Screenshot of python code**