

PYTHON CODE TO PUBLISH AND SUBSCRIBE IBM IoT PLATFORM

```
import time

import sys

import ibmiotf.application

import ibmiotf.device

import random


#Provide your IBM Watson Device Credentials

organization = "d0iq7o"

deviceType = "IOT_DEV"

deviceId = "1911073"

authMethod = "token"

authToken = "1911073abcdefgh"


# Initialize GPIO


def myCommandCallback(cmd):

    print("Command received: %s" % cmd.data['command'])

    status=cmd.data['command']

    if status == "motoron":

        print ("motor is on")

    elif status == "motor":

        print ("motor is off")

    else:

        print("Please send proper command")
```

```
#print(cmd)
```

```
try:
```

```
    deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method":  
authMethod, "auth-token": authToken}
```

```
    deviceCli = ibmiotf.device.Client(deviceOptions)
```

```
    #.....
```

```
except Exception as e:
```

```
    print("Caught exception connecting device: %s" % str(e))
```

```
    sys.exit()
```

```
# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type  
"greeting" 10 times
```

```
deviceCli.connect()
```

```
while True:
```

```
    #Get Sensor Data from random function
```

```
    temp=random.randint(90,110)
```

```
    Humid=random.randint(60,100)
```

```
    Mois=random.randint(20,120)
```

```
    data={'temp':temp,'Humid':Humid,'Mois':Mois}
```

```
    #print data
```

```
    def myOnPublishCallback():
```

```
print (" Published Temperature = %s C" % temp, "Humidity = %s %" % Humid, "Moisture = %s ppm" % Mois, "to IBM Watson")
```

```
success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0,  
on_publish=myOnPublishCallback)
```

```
if not success:
```

```
    print("\n Not connected to IoT")
```

```
time.sleep(10)
```

```
deviceCli.commandCallback = myCommandCallback
```

```
# Disconnect the device and application from the cloud
```

```
deviceCli.disconnect()
```