

DEVELOPMENT OF PYTHON CODE

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Topic	Development of python code

Goal:

To develop the python code to publish and subscribe to the commands from the IBM cloud.

Python code:

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

```
import time
```

```
import OS
```

```
import datetime
```

```
import random
```

```
myConfig = {
```

```
"identity": {
```

```
"orgId": " 023f97"
```

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

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

```
},
```

```
"auth":{
```

```
"token": " CT8N7Sz?giHVFxk-V?"
```

```
}
```

```
}
```

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

```
client.connect ()

def myCommandCallhack (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:

    soil=random.randint (0,100)

    temp=random.randint (-20,125)

    hum=random.randint (0,100)

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

    client.publishEvent (eventId="status", msgFormat="json", data=myData,
    gos=0, onPublish=None)

    print ("Published data Successfully: %s", myData)

    time.sleep (2)

    client.commandCallback = myCommandCallback

client.disconnect ()
```