

Python Code :

```
import time

import sys

import ibmiotf.application

import ibmiotf.device

import random


#Provide your IBM Watson Device Credentials

Organization = "fa4qjp"

DeviceType = "123"

deviceId = "1234567"

authMethod = "token"

authToken = "12345678"


# Initialize GPTO

def mycommandcallback(cmd):

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

    status=cmd.data['command']

    if status == "lighton":

        print ("led is on")

    elif status == "lightoff":

        print("led is off")

    else:

        print("please send proper command")

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 DHT11

    temp=random.randint(90,110)

    Humid=random.randint(60,100)

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

    #print data

    def myOnPublishCallback() :

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

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

    if not success:

        print ("Not connected to IoT")

    time.sleep(10)

    deviceCli.commandCallback = mycommandcallback

#disconnect the device and application from the cloud

deviceCli.disconnect()

```