

# SOURCE CODE

```
import time

import sys

import ibmiotf.application
import ibmiotf.device

import random


#Provide your IBM Watson Device Credentials

organization = "hde0t6"

deviceType = "galaxy"

deviceId = "98765"

authMethod = "token"

authToken = "987654321"


# Initialize GPIO

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()
```

# OUTPUT

```
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Olabi\Desktop\milky.py =====
2022-11-18 20:19:57,570 ibmiotf.device.Client INFO Connected successfully: d:hde0t6:galaxy:98765
Published Temperature = 92 C Humidity = 96 % to IBM Watson
Published Temperature = 101 C Humidity = 62 % to IBM Watson
Published Temperature = 96 C Humidity = 96 % to IBM Watson
Published Temperature = 107 C Humidity = 68 % to IBM Watson
|
```