

SOURCE CODE

```
import time
import sys

import ibmiotf.application
import ibmiotf.device

import random

#Provide your IBM Watson Device Credentials organization = "udjkcs"

deviceType = "1234" deviceId
= "1234567" authMethod = "token"

authToken = "123456789"# 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")#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 DHT11


temp=random.randint(0,100) Humid=random.randint(0,100)

pH=random.randint(0,14)


data = { 'temp' : temp, 'Humid': Humid , 'pH' : pH } #print data

def myOnPublishCallback():

print ("Published Temperature = %s C" % temp, "Humidity = %s %" % Humid,

"pHValue =

%s" % pH, "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()
```