

## PYTHON SCRIPT

```
ibm_weather_monitoring.py
1  import time
2  import sys
3  import ibmiotf.application
4  import ibmiotf.device
5  import random
6
7  #Provide your IBM Watson Device Credentials
8  organization = "j0mda0"
9  deviceType = "Weather_monitoring_Device"
10 deviceId = "weather_today"
11 authMethod = "token"
12 authToken = "1@2@3@4@"
13
14 # Initialize GPIO
15 temp=random.randint(0,50)
16 pulse=random.randint(0,90)
17 oxygen=random.randint(0,100)
18 latitude=random.randint(0,100)
19 longitude=random.randint(0,100)
20
21
22
23 def myCommandCallback(cmd):
24     print("Command received: %s" % cmd.data['command'])
25     print(cmd)
26
27 try:
28     deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method": authMethod, "auth-token": authToken}
29     deviceCli = ibmiotf.device.Client(deviceOptions)
30     #.....
31 except Exception as e:
32     print("Caught exception connecting device: %s" % str(e))
33     sys.exit()
34
35 # Connect and send a datapoint "hello" with value "world" into the cloud as an event of type "greeting" 10 times
36 deviceCli.connect()
37
38 while True:
39     #Get Sensor Data from DHT11
40
41     data={"d":{"temperature":temp,'pulse':pulse,'oxygen':oxygen,'latitude':latitude,'longitude':longitude}}
42     #print data
43
44     def myOnPublishCallBack():
45         print("Published Temperature = %s C" %temp ,"Humidity = %s %" %pulse)
46
47     success=deviceCli.publishEvent("IotSensor", "json",data,qos=0,on_publish=myOnPublishCallBack)
48     if not success:
49         print("not connected to IOTF")
50         time.sleep(1)
51     deviceCli.commandCallback = myCommandCallback
52 # Disconnect the device and application from the cloud
53 deviceCli.disconnect()
```