

## **PYTHON CODE:**

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
#Provide your IBM Watson Device Credentials
organization = "Arunpandian"
deviceType = "nodemcu"
deviceId = "1234"
authMethod = "token"
authToken = "12345678"
# Initialize GPIO
def myCommandCallback(cmd):
    print("Command received: %s" %
cmd.data['command'])
    status=cmd.data['command']
    if status=="switchon":
        print ("Switch is on")
    else:
        print ("Switch is off")
    #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)
       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, gos=0, on publish=myOnPublishCallback)
       if not success:
           print("Not connected to IoTF")
```

time.sleep(1)

deviceCli.commandCallback =
myCommandCallback

# Disconnect the device and application from the
cloud
deviceCli.disconnect()