

## PYTHON CODE

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

#Provide your IBM Watson Device Credentials
organization = "rr454u"
deviceType = "sensor_1"
deviceId = "sensor"
authMethod = "token"
authToken = "12345678"

def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['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:

    temperature=random.randint(0,100)
    humidity=random.randint(0,100)
    soil= random.randint(0,100)

    data = {'temperature' : temperature, 'Humidity': humidity
,'moisture':soil}
    #print data
    def myOnPublishCallback():
        print ("Published Temperature = %s C" % temperature, "Humidity =
%s %" % humidity, "soil Moisture = %s %" % soil,"to IBM Watson")
```

```
        success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0,
on_publish=myOnPublishCallback)
        if not success:
            print("Not connected to IoT")
            time.sleep(1)

        deviceCli.commandCallback = myCommandCallback

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