## 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
,'soil':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 IoTF")
        time.sleep(1)

    deviceCli.commandCallback = myCommandCallback

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