```
# Provide your IBM Watson Device Credentials organization = "8gyz7t" # replace the ORG ID
deviceType = "weather_monitor" # replace the Device type deviceId = "b827ebd607b5" # replace
Device ID authMethod = "token" authToken = "LWVpQPaVQ166HWN48f" # Replace the authtoken


def myCommandCallback(cmd): # function for Callback if cm.data['command'] == 'motoron':

print("MOTOR ON IS RECEIVED")

 elif cmd.data['command'] == 'motoroff': print("MOTOR OFF IS RECEIVED")

 if cmd.command == "setInterval":


  else:

if 'interval' not in cmd.data:

print("Error - command is missing requiredinformation: 'interval'")


interval = cmd.data['interval']


elif cmd.command == "print":

if 'message' not in cmd.data:

print("Error - commandis missing requiredinformation: 'message'")
else:output = cmd.data['message']

print(output)




try:


deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "authmethod":
authMethod,

"auth-token": authToken}                    deviceCli

= ibmiotf.device.Client(deviceOptions) # ..........................................


exceptException 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:

deviceCli.commandCallback = myCommandCallback


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


 SENSOR.PY


import time import sysimport ibmiotf.application importibmiotf.device

import random


# Provide your IBM Watson Device Credentials organization = "8gyz7t" # replace the ORG ID
deviceType = "weather_monitor" # replace the Device type deviceId = "b827ebd607b5" # replace
Device ID authMethod = "token" authToken = "LWVpQPaVQ166HWN48f" # Replace the authtoken




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)

#.....


exceptException 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:
```

```
temp=random.randint(0,100) pulse=random.randint(0,100)

soil=random.randint(0,100)


data = { 'temp' : temp, 'pulse': pulse ,'soil':soil} #print data                 def

myOnPublishCallback():

print ("Published Temperature = %s C" % temp, "Humidity = %s %%" % pulse,"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()
```