

## PYTHON SCRIPT:

TEAM ID	PNT2022TMID11049
PROJECT NAME	SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITAN CITIES

```
Johnny - C:\LITERATURE SURVEY\srcpy (37.0)
File Edit Format Run Options Window Help

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

#provide your IBM Watson Device credentials
organisation = 't5udfe'
deviceType = 'taspbcrcpi'
deviceId = '12345'
authMethod = 'token'
authToken = '12345678'
# Initialize GPIO
def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="lighton":
        print ('led is on')
    else :
        print ('led is off')
    #print(cmd)

try:
    deviceOptions = {'org': organisation, '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
    temper=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("IoTSense", "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()
```

Python Shell

File Edit Shell Debug Options Window Help

Python 3.7.0 (v3.7.0:1bf9cc5992, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32

Type "copyright", "credits" or "license()" for more information.

>>>

----- DEFAULT: D:\LITERATURE SURVEY\lib.py -----

2022-11-18 21:51:43,189 - ibmsoft.device.Client INFO Connected successfully: d:\yrbk8-Pooja:1234567890

Published Temperature = 57 C Humidity = 13 % to IBM Watson

Published Temperature = 44 C Humidity = 60 % to IBM Watson

Published Temperature = 12 C Humidity = 52 % to IBM Watson

Published Temperature = 73 C Humidity = 71 % to IBM Watson

Published Temperature = 93 C Humidity = 43 % to IBM Watson

Published Temperature = 87 C Humidity = 22 % to IBM Watson

Published Temperature = 91 C Humidity = 18 % to IBM Watson

Published Temperature = 4 C Humidity = 35 % to IBM Watson

Published Temperature = 32 C Humidity = 45 % to IBM Watson

Published Temperature = 64 C Humidity = 69 % to IBM Watson

Published Temperature = 67 C Humidity = 64 % to IBM Watson

Published Temperature = 35 C Humidity = 59 % to IBM Watson

Published Temperature = 65 C Humidity = 11 % to IBM Watson

Published Temperature = 43 C Humidity = 85 % to IBM Watson

Published Temperature = 35 C Humidity = 17 % to IBM Watson

Published Temperature = 55 C Humidity = 0 % to IBM Watson

Published Temperature = 67 C Humidity = 89 % to IBM Watson

Published Temperature = 45 C Humidity = 32 % to IBM Watson

Published Temperature = 22 C Humidity = 23 % to IBM Watson

Published Temperature = 34 C Humidity = 84 % to IBM Watson

Published Temperature = 24 C Humidity = 66 % to IBM Watson

Published Temperature = 36 C Humidity = 12 % to IBM Watson

Published Temperature = 26 C Humidity = 13 % to IBM Watson

Published Temperature = 41 C Humidity = 13 % to IBM Watson