

Team ID	PNT2022TMID29903
Project Name	SmartWaste Management for Metropolitan cities

## Python script:

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n3.py - F:\Desktop\bin\bin3.py (3.7.4)
File Edit Format Run Options Window Help
import requests
import json
import ibmiotf.application
import ibmiotf.device
import time
import random
import sys

# watson device details
organization = "4y1uvc"
deviceType = "BIN3"
deviceId = "BIN3ID"
authMethod = "token"
authToken = "123456789"

#generate random values for random variables (temperature, distance, loadcell)

def myCommandCallback(cmd):
    global a
    print("command recieved:%s" %cmd.data['command'])
    control=cmd.data['command']
    print(control)

try:
    deviceOptions={"org": organization, "type": deviceType}
    deviceCli = ibmiotf.device.Client(deviceOptions)
except Exception as e:
    print("caught exception connecting device %s" %str(e))
    sys.exit()

#connect and send a datapoint "temp" with value integer value
deviceCli.connect()

while True:
    distance= random.randint(10,70)
    loadcell= random.randint(5,15)
    data= {'dist':distance, 'load':loadcell}

n4.py - F:\Desktop\bin\bin4.py (3.7.4)
File Edit Format Run Options Window Help
import requests
import json
import ibmiotf.application
import ibmiotf.device
import time
import random
import sys

# watson device details
organization = "4y1uvc"
deviceType = "BIN4"
deviceId = "BIN4ID"
authMethod = "token"
authToken = "123456789"

#generate random values for random variables (temperature, distance, loadcell)

def myCommandCallback(cmd):
    global a
    print("command recieved:%s" %cmd.data['command'])
    control=cmd.data['command']
    print(control)

try:
    deviceOptions={"org": organization, "type": deviceType}
    deviceCli = ibmiotf.device.Client(deviceOptions)
except Exception as e:
    print("caught exception connecting device %s" %str(e))
    sys.exit()

#connect and send a datapoint "temp" with value integer value
deviceCli.connect()

while True:
    distance= random.randint(10,70)
    loadcell= random.randint(5,15)
    data= {'dist':distance, 'load':loadcell}
  
```

```
bin2.py - F:\Desktop\bin2.py (3.7.4)
File Edit Format Run Options Window Help

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

# watson device details
organization = "4yi0vc"
deviceType = "BIN2"
deviceId = "BIN2ID"
authMethod= "token"
authToken= "123456789"

#generate random values for randomo variables (temperature&humidity)

def myCommandCallback(cmd):
    global a
    print("command recieved:%s" %cmd.data['command'])
    control=cmd.data['command']
    print(control)
```

```
#generate random values for randomo variables (temperature&humidity)

def myCommandCallback(cmd):
    global a
    print("command recieved:%s" %cmd.data['command'])
    control=cmd.data['command']
    print(control)

try:
    deviceOptions={"org": organization, "type": deviceType,"id": deviceId,"auth-method":authMethod,"auth-token":a}
    deviceCli = ibmiotf.device.Client(deviceOptions)
except Exception as e:
    print("caught exception connecting device %s" %str(e))
    sys.exit()

#connect and send a datapoint "temp" with value integer value into the cloud as a type of event for every 10 seconds
deviceCli.connect()

while True:

    distance= random.randint(10,70)
    loadcell= random.randint(5,15)
    data= {'dist':distance,'load':loadcell}

    if loadcell < 13 and loadcell > 15:
        load = "90 %"

    elif loadcell < 8 and loadcell > 12:
        load = "80 %"

    elif loadcell < 4 and loadcell > 7:
        load = "40 %"

    else:
        load = "0 %"

    if distance < 15:
        dist = 'Risk warning!' 'Dumpster poundage getting high, Time to collect :) 90 %'

    elif distance < 40 and distance > 16:
        dist = 'Risk warning!' 'dumpster is above 80%'
```