TEAM ID	PNT2022TMID13026
PROJECT NAME	Smart Waste Management System for Metropolitan Cities

DEVELOP THE PYTHON SCRIPT

PYTHON SCRIPT :

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

#Provide your IBM Watson Device
Credentialsorganization  =  "cbseji"
deviceType = "abcd"
deviceId = "1234"
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": 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 eventof type"greeting" 10 times

deviceCli.connect()

while True:

#Get Sensor Data from DHT11

temp=random.randint(0,100

)

Humid=random.randint(0,10

0)

data = { 'temp' : temp, 'Humid':

Humid }#print data

def myOnPublishCallback():

print ("Published Temperature = %s C" % temp, "Humidity = %s %%" % Humid, "to IBMWatson")

```
        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
clouddeviceCli.disconnect()
```