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


# watson device details

organization = "a7g2jo"
devicType = "Garbage-Bin"
deviceId = "Garbage_Bin-IV"
authMethod= "token"
authToken= "Cs_e4IG2RB3ps4cAMxe"


#generate random values for random variables (Distance and load)



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

try:
        deviceOptions={"org": organization, "type": devicType,"id": deviceId,"auth-
```

```python
    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 "Distance" with value integer value into the cloud as a type of event
for every 10 seconds
deviceCli.connect()


while True:
    lat= 32.939021
    lon= 75.135731
    location= "Thiruparankundram, Madurai, Tamil Nadu, India"
    Distance= random.randint(1,75)
    Loadcell= random.randint(0,20)
    data= {'dist':Distance,'load':Loadcell,'Latitude':lat,'Longitude':lon,'Location':location}
    if Loadcell<5 and Loadcell>0:
        load="20%"
    elif Loadcell<10 and Loadcell>5:
        load="40%"
    elif Loadcell<15 and Loadcell>10:
        load="60%"
    elif Loadcell<18 and Loadcell>15:
        load="80%"
    elif Loadcell<20 and Loadcell>18:
        load="90%"
    else:
        load="100%"
```

```python
if Distance<7 and Distance>1:
    level="90%"
elif Distance<15 and Distance>7:
    level="80%"
elif Distance<30 and Distance>15:
    level="60%"
elif Distance<45 and Distance>30:
    level="40%"
elif Distance<60 and Distance>45:
    level="20%"
elif Distance<75 and Distance>60:
    level="10%"
else:
    level="0%"


if level=="90%" or load=="90%":
    warn = 'alert:''Dustbin is almost filled in latitude:32.939021 and longitude:75.135731
Thiruparankundram, Madurai, Tamil Nadu, India'


def myOnPublishCallback(latitude=32.939021,longitude=75.135731 ):
    print("Thiruparankundram, Madurai, Tamil Nadu, India")
    print("published Level of bin = %s " %level,"Load = %s " %load, "Latitude = %s "
%latitude,"Longitude = %s " %longitude)
    print(load)
    print(level)
    print(warn)


time.sleep(10)
```

```python
    success=deviceCli.publishEvent ("IoTSensor","json",warn,qos=0,on_publish= myOnPublishCallback)

    success=deviceCli.publishEvent ("IoTSensor","json",data,qos=0,on_publish= myOnPublishCallback)


    if not success:
        print("not connected to ibmiot")
    time.sleep(20)



    deviceCli.commandCallback=myCommandCallback
#disconnect the device
deviceCli.disconnect()
```