

Project Name	Smart Waste Management System For Metropolitan Cities
Team ID	PNT2022TMID20896

DEVELOP A PYTHON SCRIPT

Code:

```
import requests
import json
import ibmiotf.application
import ibmiot.device
import time
import random

#watson device
Org= "y4u8dp"
Devtype= "BIN1"
DevId= "BIN1ID"
Authmeth= "token"
Authtoken= "123456789"

def myCommandCallback(cmd):
    global a
    print("Command received:%s" %cmd.data["command"])
    control = cmd.data["Command"]
    print(control)
    try:
        devOp= {"Org":Org, "Type": Devtype, "ID":DevId, "authmethod": Authmeth, "Authtoken":
Authtoken}
        Devcli= ibmiotf.device.Client(deviceOptions)
    except Exception as e:
        print("caught exception connecting device %s" %str(e))
    sys.exit()
    Devcli.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 = "60 %"
        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:
```

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        dist = 'Risk warning:' 'dumpster is above 60%'
elif distance < 60 and distance > 41:
    dist = 'Risk warning:' '40 %'
else:
    dist = 'Risk warning:' '17 %'
if load == "90 %" or distance == "90 %":
    warn = 'alert : ' ' Dumpster poundage getting high, Time to collect'
elif load == "60 %" or distance == "60 %":
    warn = 'alert : ' 'dumpster is above 60%'
else:
    warn = 'alert : ' 'No need to collect right now '
def myOnPublishCallback(lat=10.678991, long=78.177731):
    print("Gandigramam, Karur")
    print("published distance = %s " % distance, "loadcell:%s " % loadcell, "lon = %s " % long, "lat = %s" %
    lat)
    print(load)
    print(dist)
    print(warn)
    time.sleep(10)
    success = devCli.publishEvent("IoTSensor", "json", warn, qos=0,on_publish=myOnPublishCallback)
    success = devCli.publishEvent
    ("IoTSensor", "json", data, qos=0, on_publish= myOnPublishCallback)
if not success:
    print("not connected to ibmiot")
    time.sleep(30)
devCli.commandCallback = myCommandCallback

```