

Develop a python script

Team ID	PNT2022TMID07013
Project Name	Smart waste management system for metropolitan cities

Step 1: Open python idle

Step2: Type the program

Step 3: Then click on file and save the document

Step 4: Then click on Run then Run Module

Step 5: output will be appeared in the idle window

Python script

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

```
# watson device details
organization = "4yi0vc"
devicetype = "BIN1"
deviceId = "BIN1ID"
authMethod= "token"
authToken= "123456789"
```

```

#generate random values for random 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,"authmethod":authMethod,"authtoken":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 "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 = "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:
    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 %":

```