CODING:

```
import wiotp.sdk.device
import time
import random
import ibmiotf.application
import ibmiotf.device
import requests, json
myConfig = { #Configuration
"identity": {
"orgId": "gmybrq",
"typeId": "Project",
"deviceId":"Project_main"
},
#API Key
"auth": {
"token": "1234567890"
}
}
def myCommandCallback(cmd):
print("Message received from IBM IoT Platform: %s" %cmd.data['command'])
m=cmd.data['command']
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
#OpenWeatherMap Credentials
BASE_URL = "https://api.openweathermap.org/data/2.5/weather?"
CITY = "Nagercoil"
URL = BASE_URL + "q=" + CITY + "&units=metric"+"&appid=" +
"01df65417ab3968e3fc2a38c4aee27bb"
while True:
response = requests.get(URL)
data = response.json()
#messge part
```

```
msg=random.randint(0,5)
if msg==1:
message=" HOSPITAL near by "
elif msg==2:
message=" FUEL PUMP near by "
elif msg==3:
message=" Feeling hungry!RESTAURANT Ahead "
else :
message=" SCHOOL ZONE!Slow Down Ahead "
#Speed Limit part
speed=random.randint(0,150)
if speed>=100:
speedMsg=" Limit Exceeded"
elif speed>=60 and speed<100:
speedMsg="Moderate"
else:
speedMsg="Slow"
#Diversion part
sign=random.randint(0,5)
if sign==1:
signMsg="Right Diversion"
elif sign==3:
signMsg="Left Diversion"
else:
signMsg="U Turn"
#Visibility
temperature= random.randint(0,100)
if temperature < 24:
visibility="Fog Ahead, Drive Slow"
elif temperature < 20:
visibility="Bad Weather"
else:
visibility="Clear Weather"
myData={'Temperature':temperature, 'Message':message, 'Sign':signMsg,
'Speed':speedMsg, 'Visibility':visibility}
client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
onPublish=None) #PUBLISHING TO IOT WATSON
print("Published data Successfully: %s", myData)
client.commandCallback = myCommandCallback
time.sleep(5)
```