FINAL CODE :

```
 import wiotp.sdk.device
import time
import random
import ibmiotf.application
import ibmiotf.device
import requests, json

myConfig = {
   #Configuration
   "identity": {
      "orgId": "7znh86",
      "typeId": "NODE",
      "deviceId":"1234"
   },
   #API Key
   "auth": {
      "token": "123456789"
   }
}

#Receiving callbacks from IBM IOT platform
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 = "Coimbatore, IN"
URL = BASE_URL + "q=" + CITY + "&units=metric"+"&appid=" +
"f58e4720c739a54c439aba9b05176839"

while True:
 response = requests.get(URL)
 if response.status_code == 200:
 data = response.json()
 main = data['main']
      temperature = main['temp']
      humidity = main['humidity']
      pressure = main['pressure']
      report = data['visibility']
```

```
    #messge part
    msg=random.randint(0,5)
    if msg==1:
        message="GO SLOW, SCHOOL ZONE AHEAD"
    elif msg==2:
        message="NEED HELP, POLICE STATION AHEAD"
    elif msg==3:
        message="EMERGENCY, HOSPITAL NEARBY"
    elif msg==4:
        message="DINE IN, RESTAURENT AVAILABLE"
    elif msg==5:
        message="PETROL BUNK NEARBY"
    else:
        message=""

     #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==2:
        signMsg="Speed Breaker"
    elif sign==3:
        signMsg="Left Diversion"
    elif sign==4:
        signmsg="U Turn"
    else:
         signMsg=""

     #Visibility
    if temperature < 24:
        visibility="Fog Ahead, Drive Slow"
    elif temperature < 20:
        visibility="Bad Weather"
    else:
        visibility="Clear Weather"

else:
```

```
      print("Error in the HTTP request")
   myData={'Temperature':temperature, 'Message':message, 'Sign':signMsg, 'SpeedValue':
speed, 'Speed': speedMsg, 'Visibility':visibility}
   client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
onPublish=None) #PUBLISHING TO IOT WATSON
   print("Published data Successfully: ", myData)
   print("------------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------------------
------")
   client.commandCallback = myCommandCallback
   time.sleep(5)
client.disconnect()
```