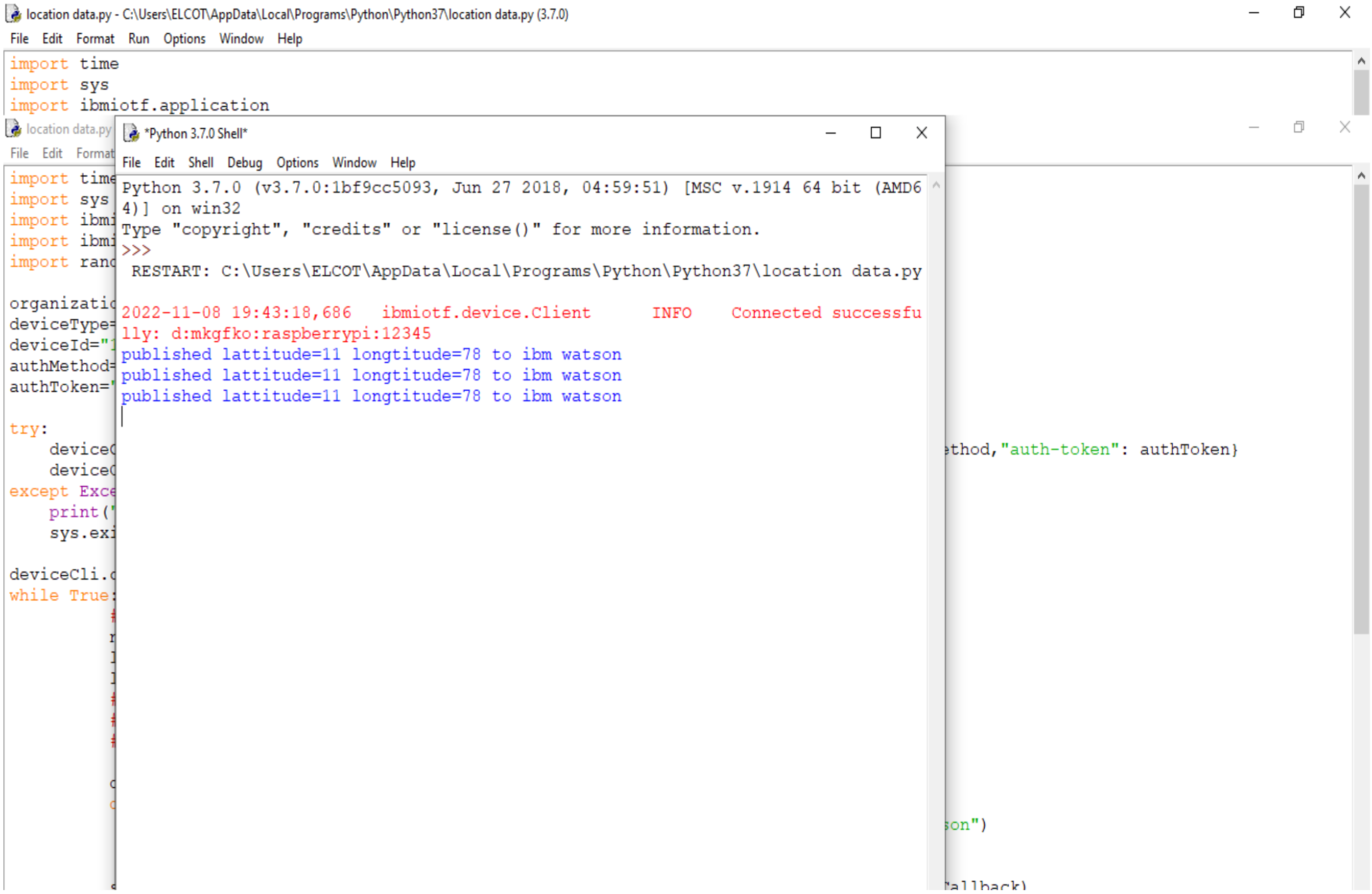
Develop A Web Application Using Node-RED Service

Python code for transferring latitude and longitude:

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
organization="mkgfko"
deviceType="raspberrypi"
deviceId="12345"
authMethod="token"
authToken="12345678"
try:
   deviceOptions={"org": organization,"type": deviceType,"id": deviceId,"auth-method": authMethod,"auth-token": authToken}
   deviceCli=ibmiotf.device.Client(deviceOptions)
except Exception as e:
   print("caught exception connecting device:%s" % str(e))
   sys.exit()
   deviceCli.connect()
while True:
        #in data
        name="kowshik"
        #lattitude=11.229592;
        #longtitude=  78.171158;
        #out data
        lattitude=12.7345;
        longtitude=13.2020;


        data={'lat':lattitude,'lon':longtitude,'name':name}
        def myOnPublishCallback():
          print("published lattitude=%d" %lattitude,"longtitude=%d" %longtitude,"to ibm watson")
success=deviceCli.publishEvent("IotSensor","json",data,qos=0,on_publish=myOnPublishCallback)
        if not success:
            print("Not connected to IoTF")
        time.sleep(3)
deviceCli.disconnect()
```

OUTPUT:


location data.py - C:\Users\ELCOT\AppData\Local\Programs\Python\Python37\location data.py (3.7.0)
File Edit Format Run Options Window Help
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help

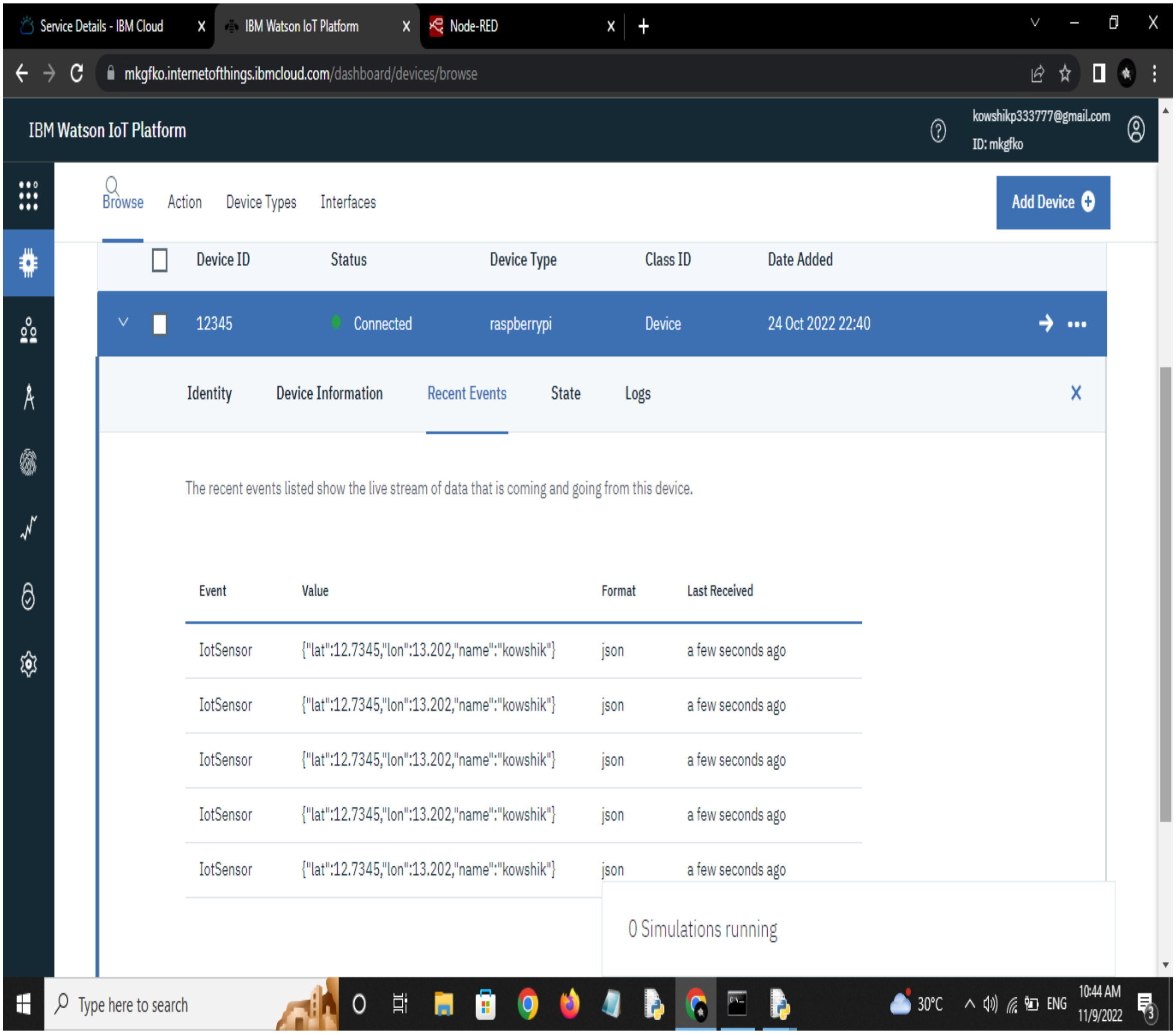
```
import time
import sys
import ibmiotf.application
```

```
import time
import sys
import ibmi
import ibmi
import rand

organizatio
deviceType=
deviceId="
authMethod=
authToken="

try:
    device(
    device(
except Exce
    print("
    sys.exi

deviceCli.c
while True:
```

```
ethod,"auth-token": authToken}
on")
allback)
```

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD6
4)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
 RESTART: C:\Users\ELCOT\AppData\Local\Programs\Python\Python37\location data.py

2022-11-08 19:43:18,686   ibmiotf.device.Client      INFO    Connected successfu
lly: d:mkgfko:raspberrypi:12345
published lattitude=11 longtitude=78 to ibm watson
published lattitude=11 longtitude=78 to ibm watson
published lattitude=11 longtitude=78 to ibm watson
```

PUBLISHED DATA IN IBM WATSON IOT PLATFORM:



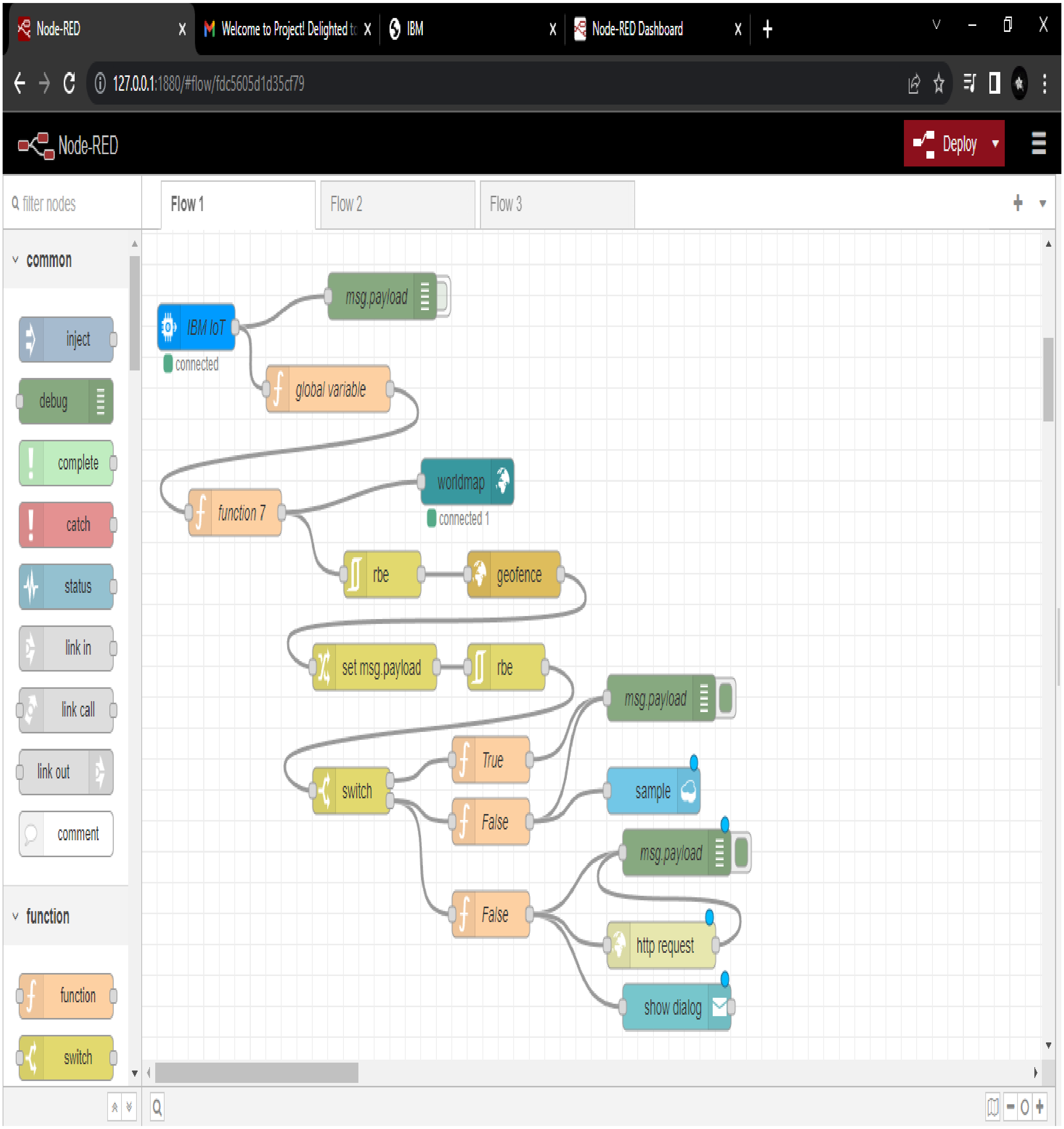
□	Device ID	Status	Device Type	Class ID	Date Added
□	12345	● Connected	raspberrypi	Device	24 Oct 2022 22:40

The recent events listed show the live stream of data that is coming and going from this device.

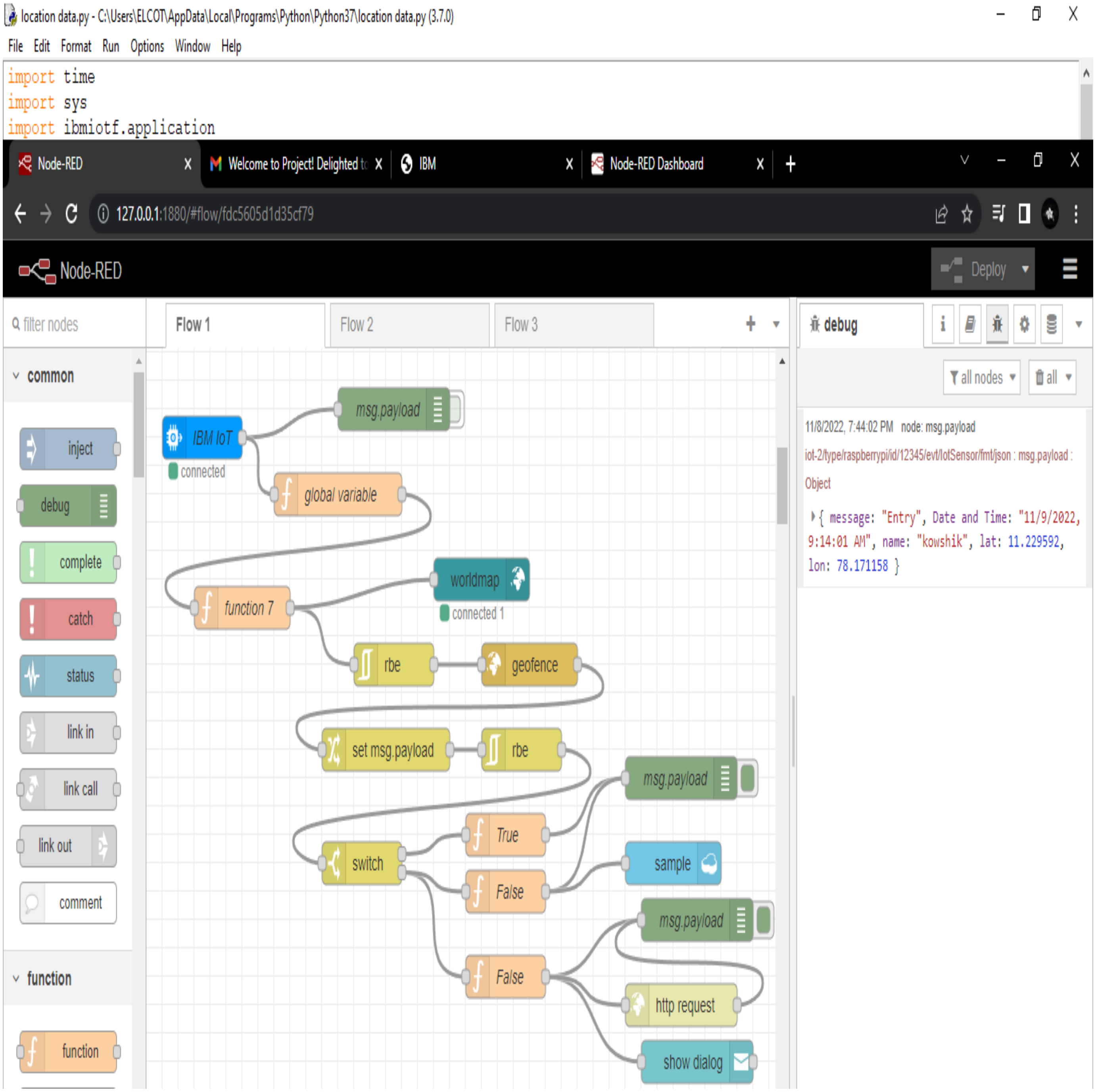
Event	Value	Format	Last Received
IotSensor	{"lat":12.7345,"lon":13.202,"name":"kowshik"}	json	a few seconds ago
IotSensor	{"lat":12.7345,"lon":13.202,"name":"kowshik"}	json	a few seconds ago
IotSensor	{"lat":12.7345,"lon":13.202,"name":"kowshik"}	json	a few seconds ago
IotSensor	{"lat":12.7345,"lon":13.202,"name":"kowshik"}	json	a few seconds ago
IotSensor	{"lat":12.7345,"lon":13.202,"name":"kowshik"}	json	a few seconds ago

0 Simulations running

WEB APPLICATION USING NODE-RED:



WHEN WE GIVE IN AREA LOCATION:



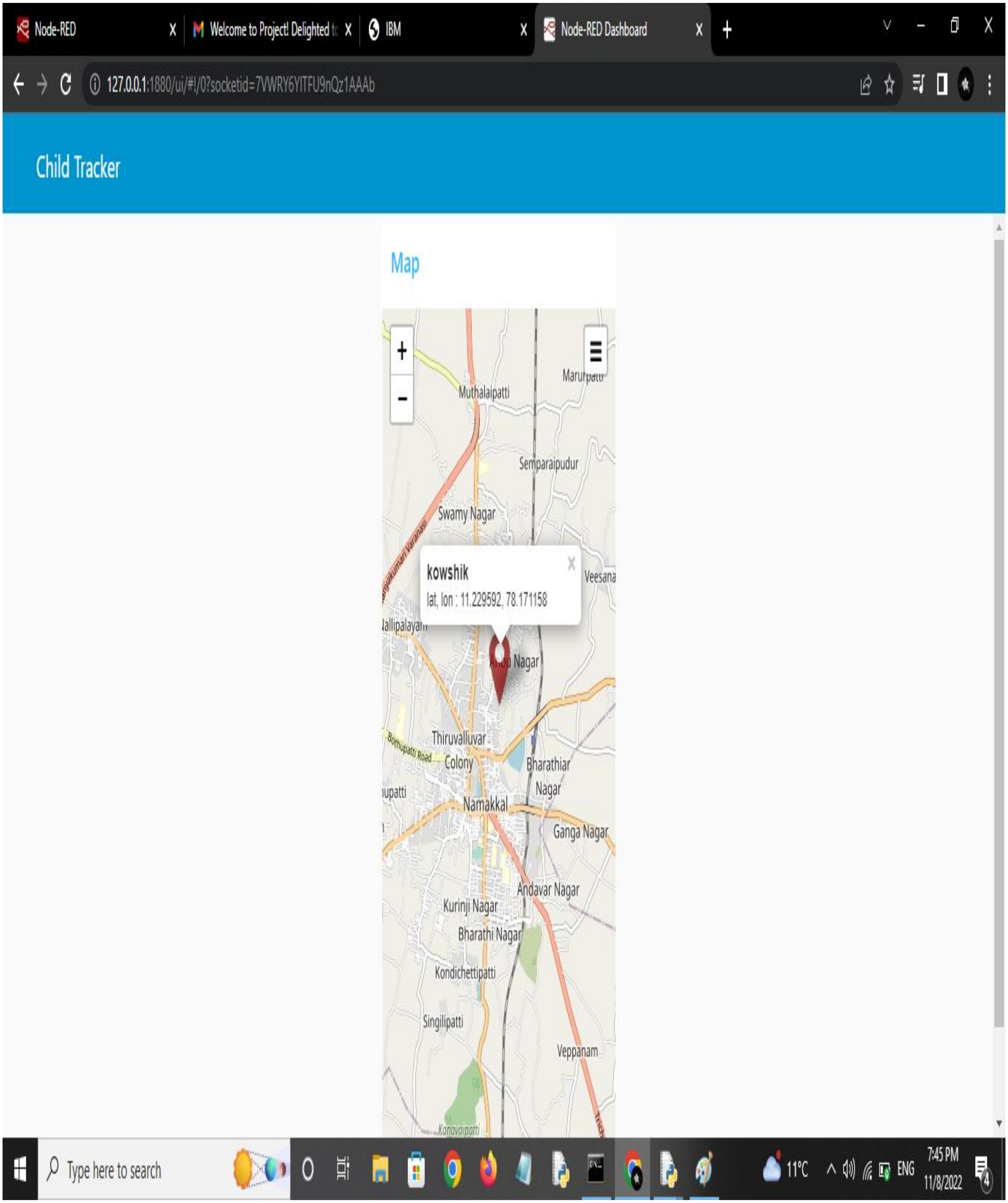
location data.py - C:\Users\ELCOT\AppData\Local\Programs\Python\Python37\location data.py (3.7.0)

```
import time
import sys
import ibmiotf.application
```

127.0.0.1:1880/#flow/fdc5605d1d35cf79

```
11/8/2022, 7:44:02 PM   node: msg.payload
iot-2/type/raspberrypi/id/12345/evt/IotSensor/fmt/json : msg.payload :
Object
{ message: "Entry", Date and Time: "11/9/2022,
9:14:01 AM", name: "kowshik", lat: 11.229592,
lon: 78.171158 }
```

OUTPUT:



127.0.0.1:1880/ui/#!/0?socketid=7VWRY6YITFU9nQz1AAAb

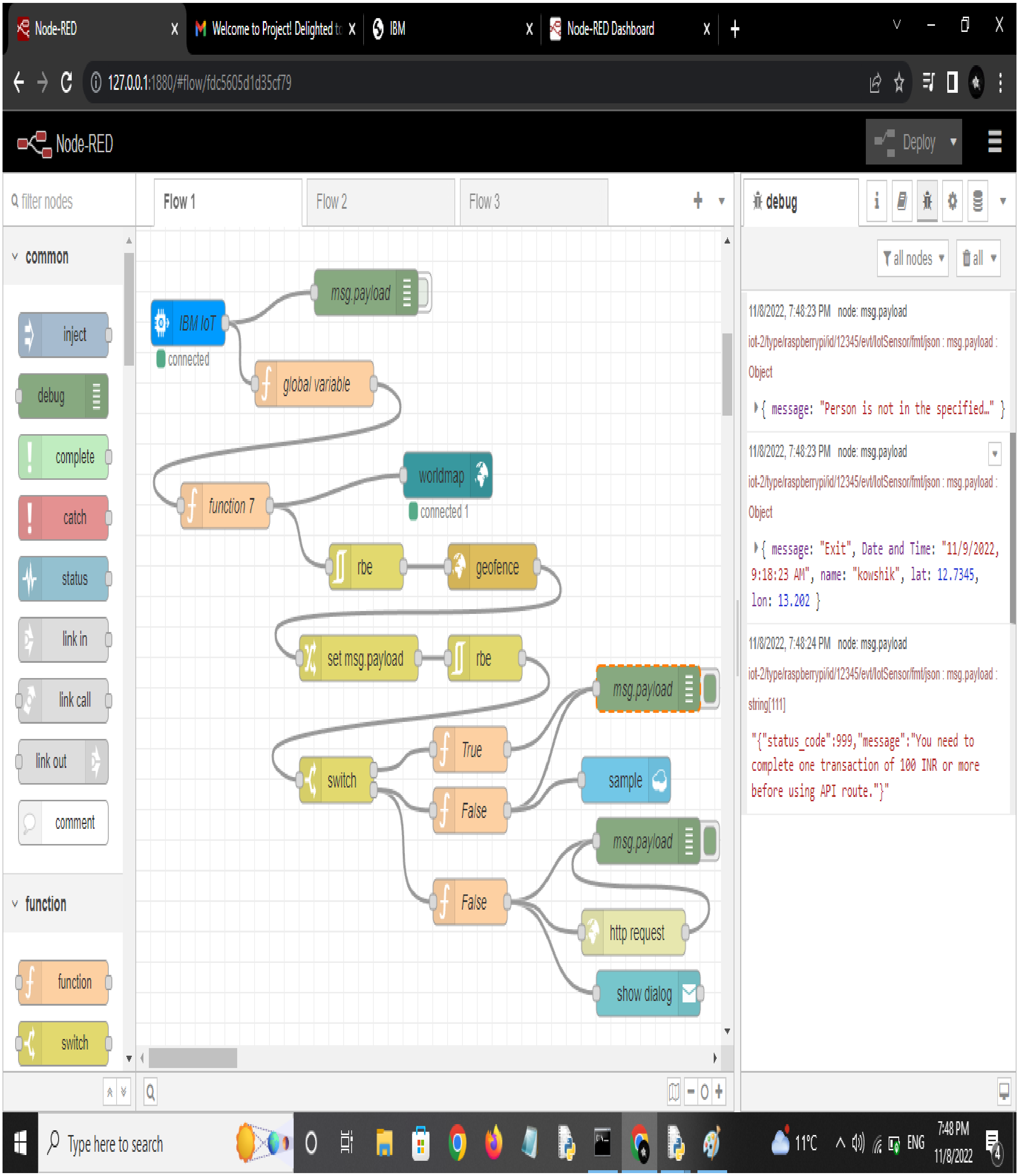
Child Tracker

Map

kowshik

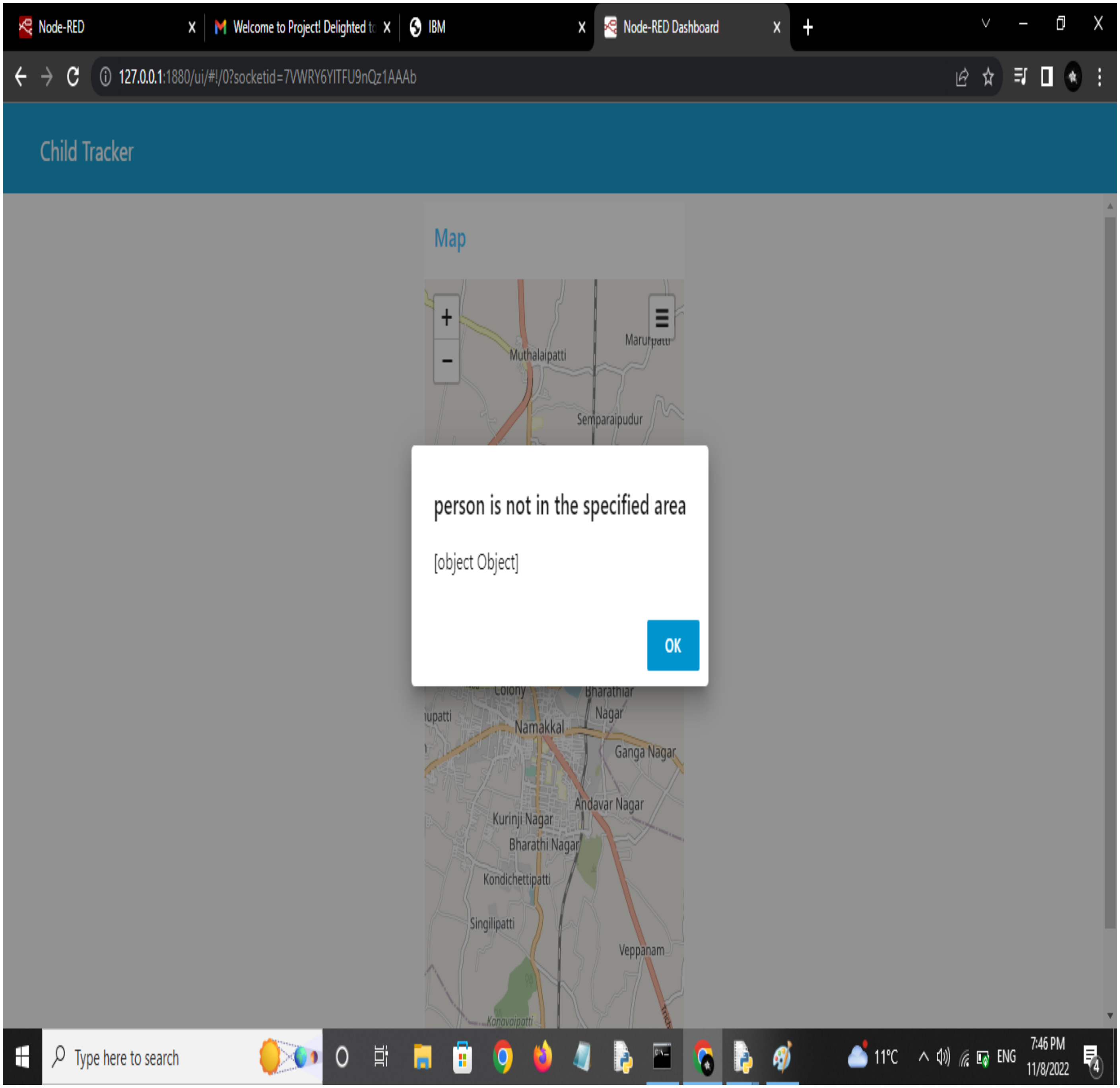
lat, lon : 11.229592, 78.171158

WHEN WE GIVE OUT AREA LOCATION:



```
11/8/2022, 7:48:23 PM   node: msg.payload
iot-2/type/raspberrypi/id/12345/evt/IotSensor/fmt/json : msg.payload :
Object
▶{ message: "Person is not in the specified…" }

11/8/2022, 7:48:23 PM   node: msg.payload
iot-2/type/raspberrypi/id/12345/evt/IotSensor/fmt/json : msg.payload :
Object
▶{ message: "Exit", Date and Time: "11/9/2022,
9:18:23 AM", name: "kowshik", lat: 12.7345,
lon: 13.202 }

11/8/2022, 7:48:24 PM   node: msg.payload
iot-2/type/raspberrypi/id/12345/evt/IotSensor/fmt/json : msg.payload :
string[111]
"{"status_code":999,"message":"You need to
complete one transaction of 100 INR or more
before using API route."}"
```

OUTPUT:



person is not in the specified area

[object Object]

OK