

DEVELOP A PYTHON SCRIPT

Date	13 November 2022
Team ID	PNT2022TMID54421
Project Name	Signs with Smart Connectivity for Better Road Safety

Signs with smart connectivity for Better road safety Create a code snippet using python to

1. Extract weather data from OpenWeatherMap using APIs
2. Send the extracted data to the cloud
3. Receive data from the cloud and view it in the python compiler

Code

```
import requests
```

```
a="https://api.openweathermap.org/data/2.5/weather?lat=13.0219092&lon=80.154133&appid=6972cbb32a8138f93496ce0dc7d1fb33"
```

```
r=requests.get(url=a)
```

```
print(r)
```

```
data=r.json()
```

```
tem=data['main']['temp']
```

```
hum=data['main']['humidity']
```

```
print("temperature is:",tem)
```

```
print("humidity is:",hum)
```

```
oceanapp.py - D:\IBM work in progress\oceanapp.py (3.11.0)
File Edit Format Run Options Window Help
import requests

a="https://api.openweathermap.org/data/2.5/weather?lat=13.0219092&lon=80.154133&appid=6972cbb32af
r=requests.get(url=a)
print(r)
data=r.json()
tem=data['main']['temp']
hum=data['main']['humidity']
print("temperature is:",tem)
print("humidity is:",hum)
```

```
IDLE Shell 3.11.0
File Edit Shell Debug Options Window Help
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:\IBM work in progress\oceanapp.py =====
<Response [200]>
temperature is: 302.12
humidity is: 79
>>>
```

28°C

```
>>>
===== RESTART: D:/IBM work in progress/oceanapp.py =====
<Response [200]>
>>>
===== RESTART: D:/IBM work in progress/oceanapp.py =====
{'coord': {'lon': 80.1541, 'lat': 13.0219}, 'weather': [{'id': 701, 'main': 'Mist', 'descriptio
n': 'mist', 'icon': '50n'}], 'base': 'stations', 'main': {'temp': 299.12, 'feels like': 299.12,
'temp_min': 299.12, 'temp_max': 299.12, 'pressure': 1013, 'humidity': 89}, 'visibility': 3000,
'wind': {'speed': 1.54, 'deg': 10}, 'clouds': {'all': 40}, 'dt': 1668533878, 'sys': {'type': 1,
'id': 9218, 'country': 'IN', 'sunrise': 1668472685, 'sunset': 1668514198}, 'timezone': 19800, '
id': 1465622, 'name': 'Porur', 'cod': 200}
>>>
```