

## **Develop a Python script**

Date	05 November 2022
Team ID	PNT2022TMID44114
Project Name	Project – Smart solution for railways
Maximum Marks	4 Marks

### **Smart solution for railways**

Create a code snippet using python to

- Extract weather data from Open Weather Map using APIs
- Send the extracted data to the cloud
- Receive data from the cloud and view it in the python compiler

The screenshot shows the OpenWeather website. At the top, a green confirmation message states: "We have sent the confirmation link to **casvalsh2001@gmail.com**. Please check your email." Below this is a navigation bar with links like "New Products", "Services", "API keys", "Billing plans", "Payments", "Block logs", "My orders", "My profile", and "Ask a question".

The main content area features a section titled "Historical weather for any location" with a description of the "Time Machine" technology and bullet points: "Historical weather data available for **ANY** coordinate" and "The depth of historical data have been extended to **40 YEARS**". It also mentions that data can be downloaded from a "Personal account" or by contacting them. There are "Learn more" and "Go to purchase" buttons.

Below this is the "Weather Dashboard" section, which is described as a "lightweight and flexible visual tool". It shows a search bar with "chennai" entered and a "Search" button. A dropdown menu is open, showing options: "My services", "My API keys", "My payments", "My profile", and "Logout".

The dashboard displays weather data for "Chennai, IN" with "scattered clouds", a temperature of "31°C", wind speed of "4.63 m/s", and "1010 hpa". It also shows "Geo coords [13.0878, 80.2785]".

At the bottom, there is a section titled "Search engine is very flexible. How it works:" with a bullet point explaining that users should provide the city name, a comma, and a 2-letter country code (ISO3166). Example: "London, GB" or "New York, US".

Below this is a Plesk advertisement with the text "Control & Simplify your WebOps" and a "SIGN UP" button.

### requests

```
a = "https://api.openweathermap.org/data/2.5/weather?q=Chennai,IN&appid=6d13d12f9cd34a07071a5795d01e2c47r="
```

```
requests.get(us=a)
```

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

```
print(r) print(data)
```

```
temp = data["main"]["temp"] hum = data["main"]["humidity"] print("Temperature is : ",temp) print("Humidity is : ",hum)
```

<Response [200]>

“

Temperature is : 298.14s>>

===== RESTART: E:/â BM/preMeatherMap.py =====

< Res ponse (200)>

```
{'coord':{'Toni80.2785','Path'13.0878},'weather':[{'ids701','main':'Mist','descnption':  
'mist','icon':'5On'},{'ids TOO','main':'Rain','descnption 'Tight rain','icons 'JOn'}]],'bas e': 'stations', 'mains {'tempt  
298.14, 'feels liked 299.15, 'ternp min': 298.1 4, 'ternp ma z 298.14, 'pressured 'IO't 2, 'humidity': 94}, 'visibility':  
2TOO,'wind':{'speed':'1.54,'deg  
350},'rains('1h':0.12),'clouds {'aTT':75}, 'dt':'16673174'16,'sys':{'type':1,'id':92 8,  
'country': ' T N', 'sunse 166726275 'I , 'sunsets ñ 667304738}, 'timezone': 19800, 'ids 1 264527, 'name': 'Chennai', 'cod':  
200}
```

Memperature is : 298.14Humidity is : 94