

Step 1: create account in OpenWeatherMap.org

- As soon as we get logged into the application individual is provided with the API key through which one can access the current weather report.

Step 2: install python in the system.

- Install the “requests” module for the execution of the code

```
C:\Users\Samruddhi\Desktop>python -m pip install requests
Collecting requests
  Downloading requests-2.25.1-py2.py3-none-any.whl (61 kB)
    |#####| 61 kB 130 kB/s
Collecting certifi>=2017.4.17
  Downloading certifi-2020.12.5-py2.py3-none-any.whl (147 kB)
    |#####| 147 kB 62 kB/s
Collecting chardet<5,>=3.0.2
  Downloading chardet-4.0.0-py2.py3-none-any.whl (178 kB)
    |#####| 178 kB 15 kB/s
Collecting idna<3,>=2.5
  Downloading idna-2.10-py2.py3-none-any.whl (58 kB)
    |#####| 58 kB 11 kB/s
Collecting urllib3<1.27,>=1.21.1
  Downloading urllib3-1.26.2-py2.py3-none-any.whl (136 kB)
    |#####| 136 kB 18 kB/s
Installing collected packages: certifi, chardet, idna, urllib3, requests
Successfully installed certifi-2020.12.5 chardet-4.0.0 idna-2.10 requests-2.25.1 urllib3-1.26.2
WARNING: You are using pip version 20.2.3; however, version 20.3.3 is available.
You should consider upgrading via the 'C:\Users\Samruddhi\AppData\Local\Programs\Python\Python39\python.exe -m pip install --upgrade pip' command.

C:\Users\Samruddhi\Desktop>C:\Users\Samruddhi\AppData\Local\Programs\Python\Python39\python.exe -m pip install --upgrade pip
Collecting pip
  Downloading pip-20.3.3-py2.py3-none-any.whl (1.5 MB)
    |#####| 1.5 MB 37 kB/s
Installing collected packages: pip
  Attempting uninstall: pip
    Found existing installation: pip 20.2.3
    Uninstalling pip-20.2.3:
      Successfully uninstalled pip-20.2.3
  Successfully installed pip-20.3.3
```

Step 3: write the code for fetching the current weather data

- Put your API key to fetch

```
# Python program to find current
```

```
# weather details of any city
```

```
# using openweathermap api
```

```
# import required modules
```

```
import requests
```

```
import json ,sys
```

```
# Enter your API key here
```

```
api_key = "5fbe120f25b1e772aaab7a5926eb0292"
```

```
// this api key is generated after the account is created.
```

```
# base_url variable to store url
```

```
base_url = "http://api.openweathermap.org/data/2.5/weather?"
```

```
# Give city name
```

```
city_name = input("Enter city name : ")
```

```
# complete_url variable to store
```

```
# complete url address
```

```
complete_url = base_url + "appid=" + api_key + "&q=" + city_name
```

```
# get method of requests module

# return response object

response = requests.get(complete_url)


# json method of response object

# convert json format data into

# python format data

x = response.json()


# Now x contains list of nested dictionaries

# Check the value of "cod" key is equal to

# "404", means city is found otherwise,

# city is not found

if x["cod"] != "404":

    # store the value of "main"

    # key in variable y

    y = x["main"]

    # store the value corresponding

    # to the "temp" key of y

    current_temperature = y["temp"]
```

```
# store the value corresponding
```

```
# to the "pressure" key of y
```

```
current_pressure = y["pressure"]
```

```
# store the value corresponding
```

```
# to the "humidity" key of y
```

```
current_humidiy = y["humidity"]
```

```
# store the value of "weather"
```

```
# key in variable z
```

```
z = x["weather"]
```

```
# store the value corresponding
```

```
# to the "description" key at
```

```
# the 0th index of z
```

```
weather_description = z[0]["description"]
```

```
# print following values
```

```
print(" Temperature (in kelvin unit) = " +
```

```
      str(current_temperature) +
```

```
      "\n atmospheric pressure (in hPa unit) = " +
```

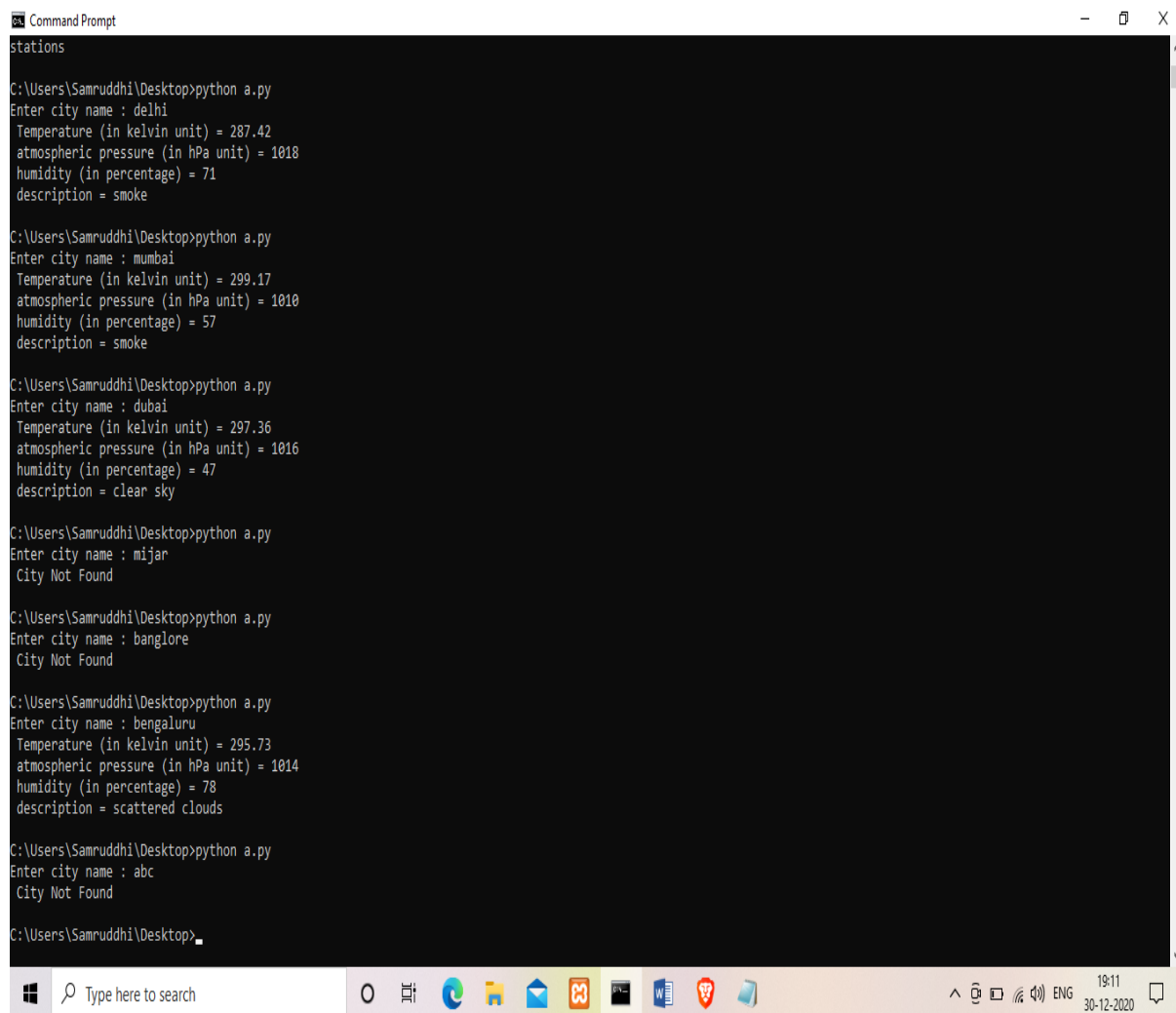
```
      str(current_pressure) +
```

```
"\n humidity (in percentage) = " +  
    str(current_humidiy) +  
    "\n description = " +  
    str(weather_description))
```

else:

```
print (" City Not Found ")
```

Step 4: Run the code and enter the city for which you desire to know the weather report



```
stations  
C:\Users\Samruddhi\Desktop>python a.py  
Enter city name : delhi  
Temperature (in kelvin unit) = 287.42  
atmospheric pressure (in hPa unit) = 1018  
humidity (in percentage) = 71  
description = smoke  
  
C:\Users\Samruddhi\Desktop>python a.py  
Enter city name : mumbai  
Temperature (in kelvin unit) = 299.17  
atmospheric pressure (in hPa unit) = 1010  
humidity (in percentage) = 57  
description = smoke  
  
C:\Users\Samruddhi\Desktop>python a.py  
Enter city name : dubai  
Temperature (in kelvin unit) = 297.36  
atmospheric pressure (in hPa unit) = 1016  
humidity (in percentage) = 47  
description = clear sky  
  
C:\Users\Samruddhi\Desktop>python a.py  
Enter city name : mijar  
City Not Found  
  
C:\Users\Samruddhi\Desktop>python a.py  
Enter city name : banglore  
City Not Found  
  
C:\Users\Samruddhi\Desktop>python a.py  
Enter city name : bengaluru  
Temperature (in kelvin unit) = 295.73  
atmospheric pressure (in hPa unit) = 1014  
humidity (in percentage) = 78  
description = scattered clouds  
  
C:\Users\Samruddhi\Desktop>python a.py  
Enter city name : abc  
City Not Found  
  
C:\Users\Samruddhi\Desktop>
```