

## **ASSIGNMENT 2**

Build a python code, Assume u get temperature and humidity values (generated with random function to a variable) and write a condition to continuously detect alarm in case of high temperature.

### **PROGRAM:**

```
import random
while(True):
    a=random.randint(10,99)
    b=random.randint(10,99)
    if(a>35 and b>60):
        print("High temperature and humidity
of:",a,"%",b,"% is sensed.", "\n Alarm is on")
    elif(a<35 and b<60):
        print("Normal temperature and humidity
of:",a,"%",b,"% is sensed", "\n Alarm is off")
        break
import requests

# paste your api key here
api_key =
"4256b3de394a56a86ee35e43af6f5c2e"
```

```
# getting city name from user
city = input("Enter city name: ")
```

```
"""
```

we are appending the city variable and api\_key variable to complete the url. for example city name is Mumbai then url looks like  
<https://api.openweathermap.org/data/2.5/weather?q=Mumbai&units=metric&APPID=4256b3de394a56a86ee35e43af6f5c2e>

```
"""
```

```
data = requests.get(

f"https://api.openweathermap.org/data/2.5/weather?q={city}&units=metric&APPID={api_key}"
)
```

```
# uncomment the following line and run it so you
can get the data in json format
# print(data.json())
```

```
# getting the data
print(f"Location: {data.json().get('name')},
{data.json().get('sys').get('country')}")
```

```
print(f"Temperature:
{data.json().get('main')['temp']}°C")
print(f"Weather:
{data.json().get('weather')[0].get('main')}")
print(
    f"Min/Max Temperature:
{data.json().get('main')['temp_min']}°C/{data.json
().get('main')['temp_max']}°C"
)
print(f"Humidity:
{data.json().get('main')['humidity']}%")
print(f"Wind: {data.json().get('wind')['speed']}
km/h")
```

## OUTPUT :

```
Normal temperature and humidity of: 13 % 41 %
Is sensed
Alarm is off
Enter city name: vellore
Location: Vellore, IN
Temperature: 33.87°C
Weather: Clouds
Min/Max Temperature: 33.87°C/33.87°C
Humidity: 41%
Wind: 7.23 km/h
```

# RESULT :

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main.py

Run

Shell

Clear

```
24 )
25
26 # uncomment the following line and run it so you can get the data in
    json format
27 # print(data.json())
28
29 # getting the data
30 print(f"Location: {data.json().get('name')}, {data.json().get('sys').get(
    ('country'))}")
31 print(f"Temperature: {data.json().get('main')['temp']]°C")
32 print(f"Weather: {data.json().get('weather')[0].get('main')}")
33 print(
34     f"Min/Max Temperature: {data.json().get('main')['temp_min']]°C/{data
        .json().get('main')['temp_max']]°C"
35 )
36 print(f"Humidity: {data.json().get('main')['humidity']]%")
37 print(f"Wind: {data.json().get('wind')['speed']] km/h")
38
39
40
41
42
```

^ Normal temperature and humidity of: 13 % 41 % is sensed

Alarm is off

Enter city name: vellore

Location: Vellore, IN

Temperature: 33.87°C

Weather: Clouds

Min/Max Temperature: 33.87°C/33.87°C

Humidity: 41%

Wind: 7.23 km/h

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