

## Assignment - 2

### Python Programming

Assignment Date	21 September 2022
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Maximum Marks	

#### Question-1:

*Build a python code, Assume you 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.*

#### CODE:

**#Weather data From Kanchipuram**

**#import the request module from pip**

**import requests, json**

**#getting weather apiKey from Openweathermap**

**apiKey="d3bcb2501b7fa0ed5ea247df2c8f6969"**

**cityName = "Kanchipuram"**

**#The url provides the weather data about the city**

**url = " https://api.openweathermap.org/data/2.5/weather?q="+ cityName +  
"&appid="+ apiKey + "&units=metric"**

**response = requests.get(url)**

**data =response.json()**

```
Temperature=data["main"]["temp"]
```

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

```
print("The temperature is " + str(Temperature) + "°C")
```

```
print("The humidity is " + str(Humidity) + "%")
```

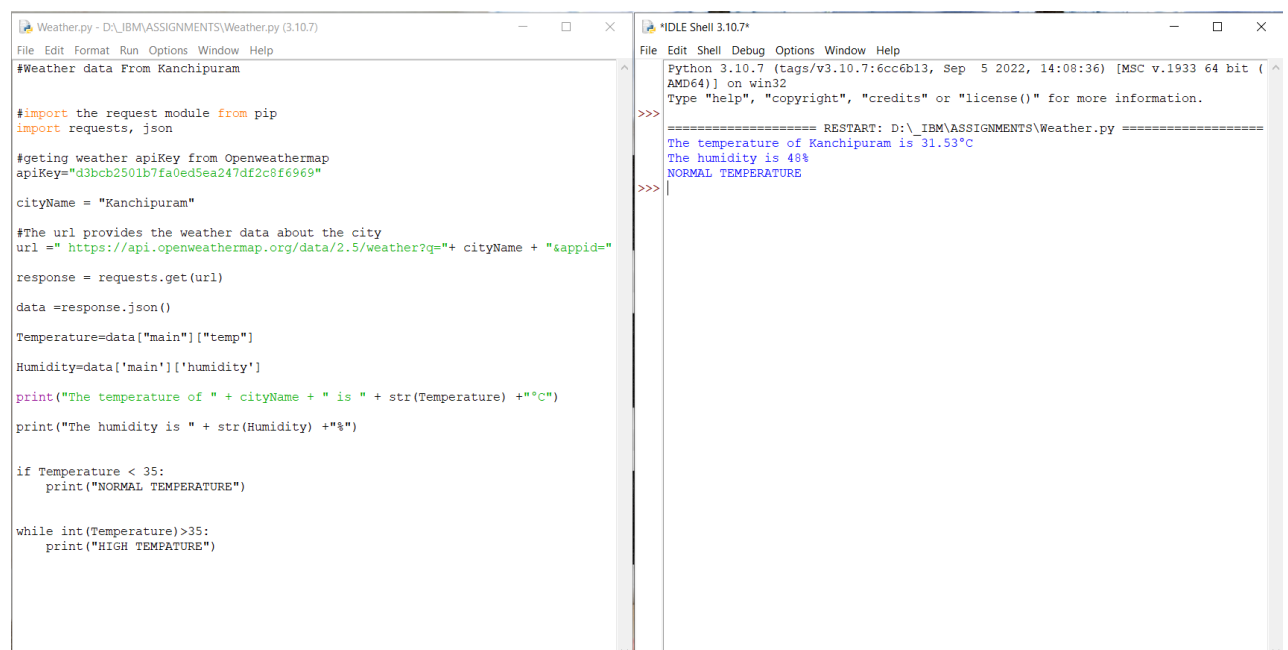
```
if Temperature < 35:
```

```
    print("NORMAL TEMPERATURE")
```

```
while int(Temperature)>35:
```

```
    print("HIGH TEMPATURE")
```

## OUTPUT



The image shows a screenshot of a Python script and its output. The script is named 'Weather.py' and is located at 'D:\\_IBM\ASSIGNMENTS\Weather.py (3.10.7)'. The script imports the 'requests' and 'json' modules, gets the weather API key from Openweathermap, and uses the city name 'Kanchipuram' to fetch weather data. It then prints the temperature and humidity, and checks if the temperature is below 35°C (Normal Temperature) or above 35°C (High Temperature).

```
#Weather data From Kanchipuram

#import the request module from pip
import requests, json

#getting weather apiKey from Openweathermap
apiKey="d3bcb2501b7fa0ed5ea247df2c8f6969"

cityName = "Kanchipuram"

#The url provides the weather data about the city
url =" https://api.openweathermap.org/data/2.5/weather?q="+ cityName + "&appid="

response = requests.get(url)
data =response.json()

Temperature=data["main"]["temp"]
Humidity=data['main']['humidity']

print("The temperature of " + cityName + " is " + str(Temperature) + "°C")
print("The humidity is " + str(Humidity) + "%")

if Temperature < 35:
    print("NORMAL TEMPERATURE")

while int(Temperature)>35:
    print("HIGH TEMPATURE")
```

The output of the script is shown in the 'IDLE Shell 3.10.7\*' window. It displays the temperature and humidity for Kanchipuram, and then prints 'NORMAL TEMPERATURE'.

```
Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep  5 2022, 14:08:36) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:\_IBM\ASSIGNMENTS\Weather.py =====
The temperature of Kanchipuram is 31.53°C
The humidity is 48%
NORMAL TEMPERATURE
>>>
```