

ASSIGNMENT-2

HUMIDITY AND TEMPERATURE

PROGRAM:

```
# import the random and time library in python script.

import random

import time

# iterate the random values of Temperature and humidity within the specified range.

while True:

    temperature = random.randint(32, 212)

    humidity = random.randint(0, 100)

    #print the values of Temperature and humidity.

    print("Temperature is : "+str(temperature)+"°F")

    print("Temperature in celsius : "+str(((temperature-32)*5)//9)+"°C")

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

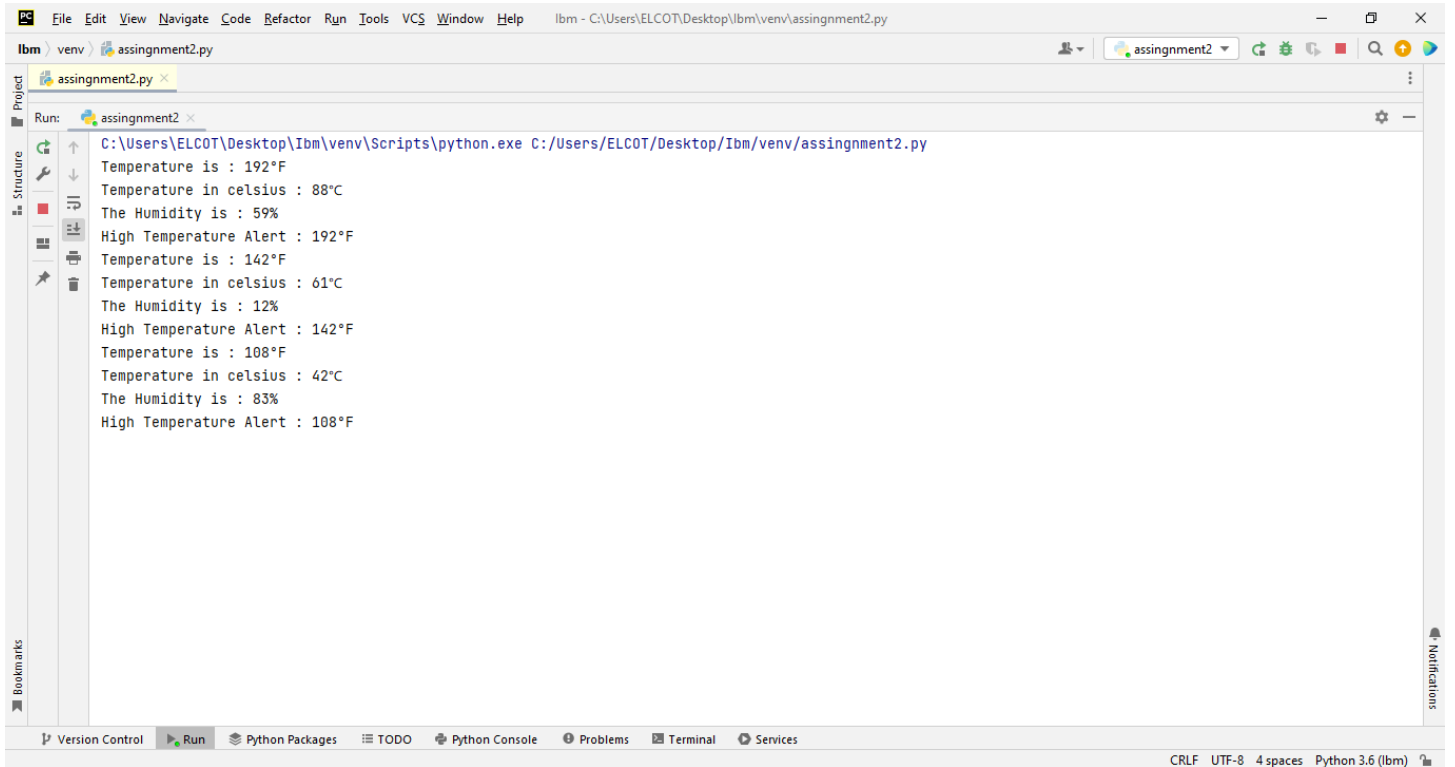
    # check if the temperature values are higher than 100°F.

    if (temperature >= 100):

        print("High Temperature Alert : "+str(temperature)+"°F")

        time.sleep(10)
```

OUTPUT:



```
C:\Users\ELCOT\Desktop\Ibm\venv\Scripts\python.exe C:/Users/ELCOT/Desktop/Ibm/venv/assingment2.py
Temperature is : 192°F
Temperature in celsius : 88°C
The Humidity is : 59%
High Temperature Alert : 192°F
Temperature is : 142°F
Temperature in celsius : 61°C
The Humidity is : 12%
High Temperature Alert : 142°F
Temperature is : 108°F
Temperature in celsius : 42°C
The Humidity is : 83%
High Temperature Alert : 108°F
```

The screenshot shows an IDE window with the file path `C:\Users\ELCOT\Desktop\Ibm\venv\assingment2.py`. The Run console displays the output of the script, which includes temperature and humidity readings in both Fahrenheit and Celsius, and high temperature alerts. The output is as follows:

```
C:\Users\ELCOT\Desktop\Ibm\venv\Scripts\python.exe C:/Users/ELCOT/Desktop/Ibm/venv/assingment2.py
Temperature is : 192°F
Temperature in celsius : 88°C
The Humidity is : 59%
High Temperature Alert : 192°F
Temperature is : 142°F
Temperature in celsius : 61°C
The Humidity is : 12%
High Temperature Alert : 142°F
Temperature is : 108°F
Temperature in celsius : 42°C
The Humidity is : 83%
High Temperature Alert : 108°F
```

The IDE interface includes a menu bar (File, Edit, View, Navigate, Code, Refactor, Run, Tools, VCS, Window, Help), a toolbar with icons for running and debugging, and a sidebar with Project, Structure, and Bookmarks views. The bottom status bar shows settings like CRLF, UTF-8, 4 spaces, and Python 3.6 (Ibm).