

## Assignment -2

### Python Programming

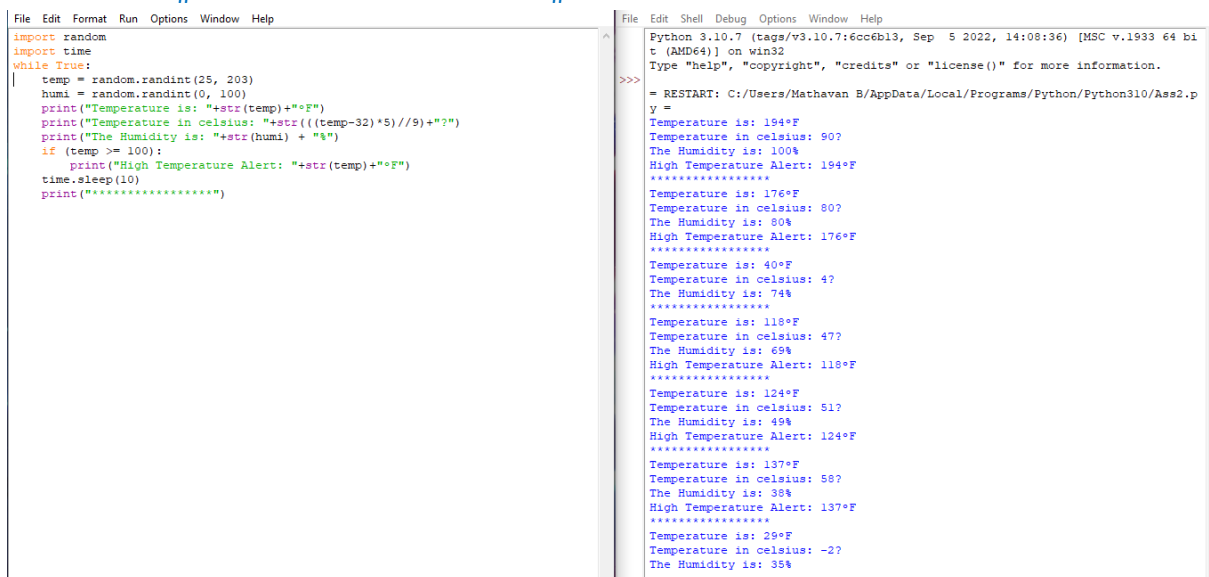
Assignment Date	26 September 2022
Student Name	Mr.B.Mathavan
Student Roll Number	621319106054
Maximum Marks	2 Marks

#### Question-1:

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.

#### Solution:

```
import random
import time
while True:
    temp=random.randint(25,203)
    humi =random.randint(0, 100)
    print("Temperature is: "+str(temp)+"°F")
    print("Temperature in celsius: "+str(((temp-32)*5)//9)+"°C")
    print("The Humidity is: "+str(humi) + "%")
    if (temp >= 100):
        print("High Temperature Alert: "+str(temp)+"°F")
    time.sleep(10)
    print("*****")
#-----#
#-----#
```



The screenshot shows a Python IDE with two windows. The left window displays the source code, and the right window shows the output of the program. The code is a while loop that generates random temperature and humidity values, prints them, and checks for a high temperature alert. The output shows the program running for several iterations, with temperature values ranging from 40°F to 194°F and humidity values from 35% to 100%. A high temperature alert is triggered when the temperature reaches 194°F.

```
File Edit Format Run Options Window Help
import random
import time
while True:
    temp = random.randint(25, 203)
    humi = random.randint(0, 100)
    print("Temperature is: "+str(temp)+"°F")
    print("Temperature in celsius: "+str(((temp-32)*5)//9)+"°C")
    print("The Humidity is: "+str(humi) + "%")
    if (temp >= 100):
        print("High Temperature Alert: "+str(temp)+"°F")
    time.sleep(10)
    print("*****")
#-----#
#-----#
```

```
Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022, 14:08:36) [MSC v.1933 64 bi
t (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/Mathavan B/AppData/Local/Programs/Python/Python310/Ass2.p
y =
Temperature is: 194°F
Temperature in celsius: 90°
The Humidity is: 100%
High Temperature Alert: 194°F
*****
Temperature is: 176°F
Temperature in celsius: 80°
The Humidity is: 80%
High Temperature Alert: 176°F
*****
Temperature is: 40°F
Temperature in celsius: 4°
The Humidity is: 74%
*****
Temperature is: 118°F
Temperature in celsius: 47°
The Humidity is: 69%
High Temperature Alert: 118°F
*****
Temperature is: 124°F
Temperature in celsius: 51°
The Humidity is: 49%
High Temperature Alert: 124°F
*****
Temperature is: 137°F
Temperature in celsius: 58°
The Humidity is: 38%
High Temperature Alert: 137°F
*****
Temperature is: 29°F
Temperature in celsius: -2°
The Humidity is: 35%
```