

## ASSIGNMENT – 2

Assignment Date	25 September 2022
Student Name	Sivadhanush T
Student Roll Number	721219106049
Maximum Marks	2 Marks

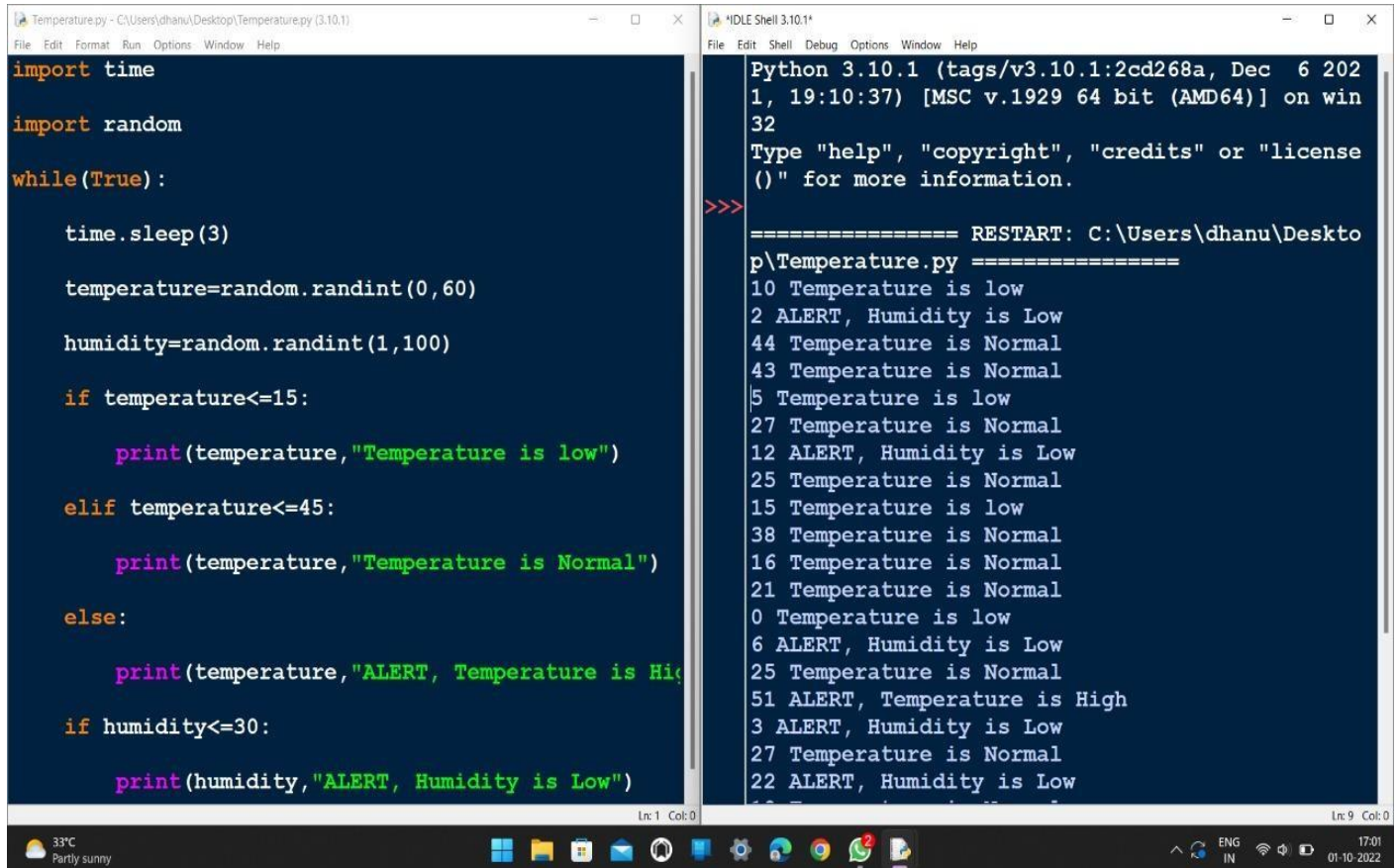
**Question :** Build a python code, Assume you get temperature and humidity values (generated with random function to a variable) and write a condition to continuously detect alarm in case of high temperature.

Solution:

### CODE

```
import time
import random
while(True):
    time.sleep(3)
    temperature=random.randint(0,60)
    humidity=random.randint(1,100)
    if temperature<=15:
        print(temperature,"Temperature is low")
    elif temperature<=45:
        print(temperature,"Temperature is Normal")
    else:
        print(temperature,"ALERT, Temperature is High")
    if humidity<=30:
        print(humidity,"ALERT, Humidity is Low")
    elif humidity<=70:
        print(humidity,"Humidity is Normal")
    else:
        print(humidity,"Humidity is High")
```

## OUTPUT



The image shows a screenshot of a Windows desktop with two windows open. The left window is a text editor showing a Python script named 'Temperature.py'. The script uses the 'time' and 'random' modules to generate random temperature and humidity values, and prints alerts based on these values. The right window is the IDLE Shell, showing the execution of the script. The output displays a series of temperature and humidity readings, with alerts for low temperature, low humidity, and high temperature.

```
import time

import random

while(True):

    time.sleep(3)

    temperature=random.randint(0,60)

    humidity=random.randint(1,100)

    if temperature<=15:

        print(temperature,"Temperature is low")

    elif temperature<=45:

        print(temperature,"Temperature is Normal")

    else:

        print(temperature,"ALERT, Temperature is High")

    if humidity<=30:

        print(humidity,"ALERT, Humidity is Low")
```

Python 3.10.1 (tags/v3.10.1:2cd268a, Dec 6 2021, 19:10:37) [MSC v.1929 64 bit (AMD64)] on win32  
Type "help", "copyright", "credits" or "license()" for more information.  
>>>  
===== RESTART: C:\Users\dhanu\Desktop\Temperature.py =====  
10 Temperature is low  
2 ALERT, Humidity is Low  
44 Temperature is Normal  
43 Temperature is Normal  
5 Temperature is low  
27 Temperature is Normal  
12 ALERT, Humidity is Low  
25 Temperature is Normal  
15 Temperature is low  
38 Temperature is Normal  
16 Temperature is Normal  
21 Temperature is Normal  
0 Temperature is low  
6 ALERT, Humidity is Low  
25 Temperature is Normal  
51 ALERT, Temperature is High  
3 ALERT, Humidity is Low  
27 Temperature is Normal  
22 ALERT, Humidity is Low