

## ASSIGNMENT – 2

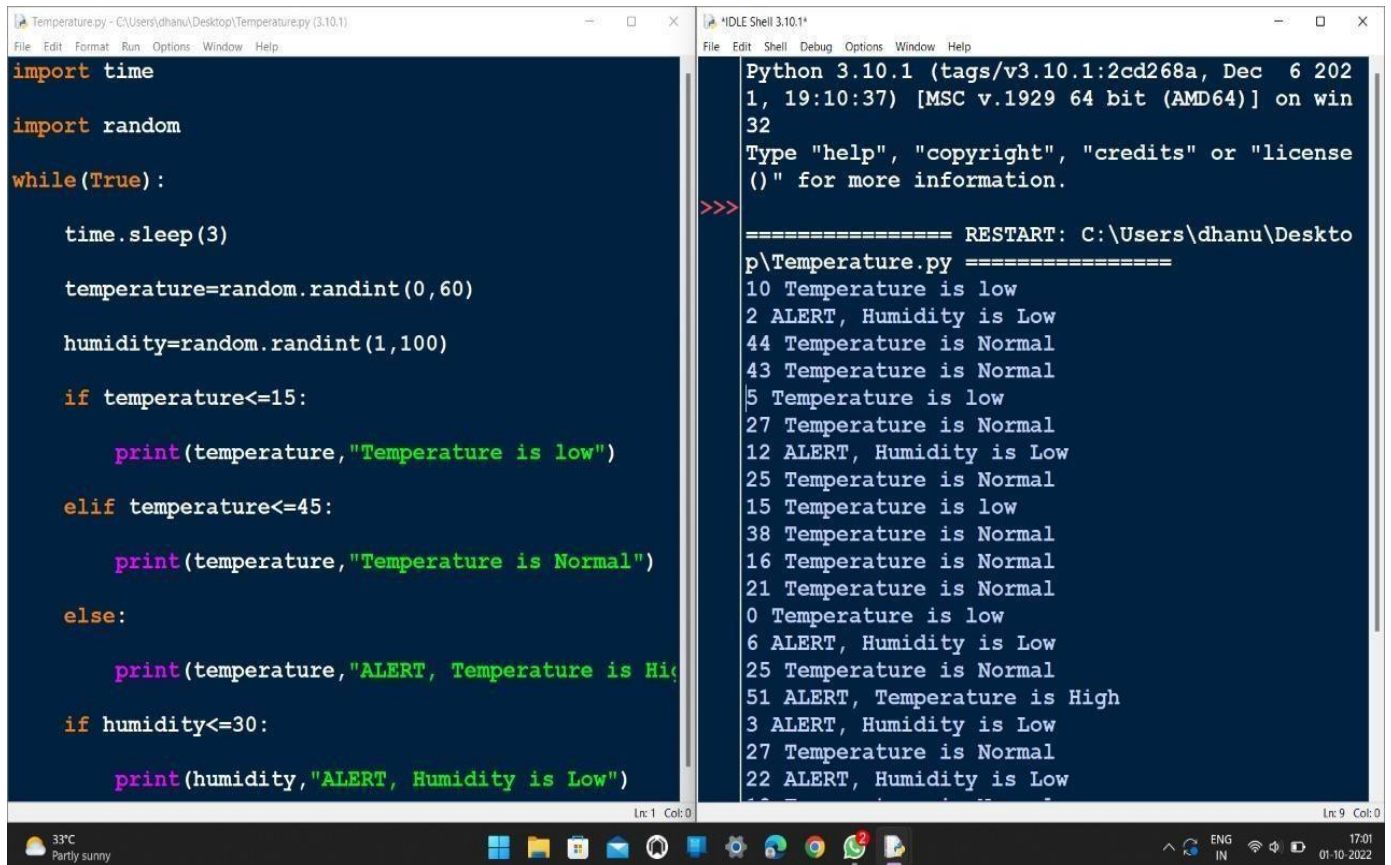
**Question :** Build a python code, Assume you get temperature and humidity values(generated with random function to a variable) and write a condition to continuously detect alarm in case of high temperature.

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 Python script editor titled 'Temperature.py - C:\Users\dhanu\Desktop\Temperature.py (3.10.1)'. It contains a Python script that generates random temperature and humidity values and prints status messages based on thresholds. The right window is the IDLE Shell titled 'IDLE Shell 3.10.1\*'. It shows the output of the script, which includes the Python version information and a series of status messages like 'Temperature is low', 'ALERT, Humidity is Low', and 'Temperature is Normal'.

```
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
```