

## ASSIGNMENT-2

**Student name:** Jaffer sathick HM

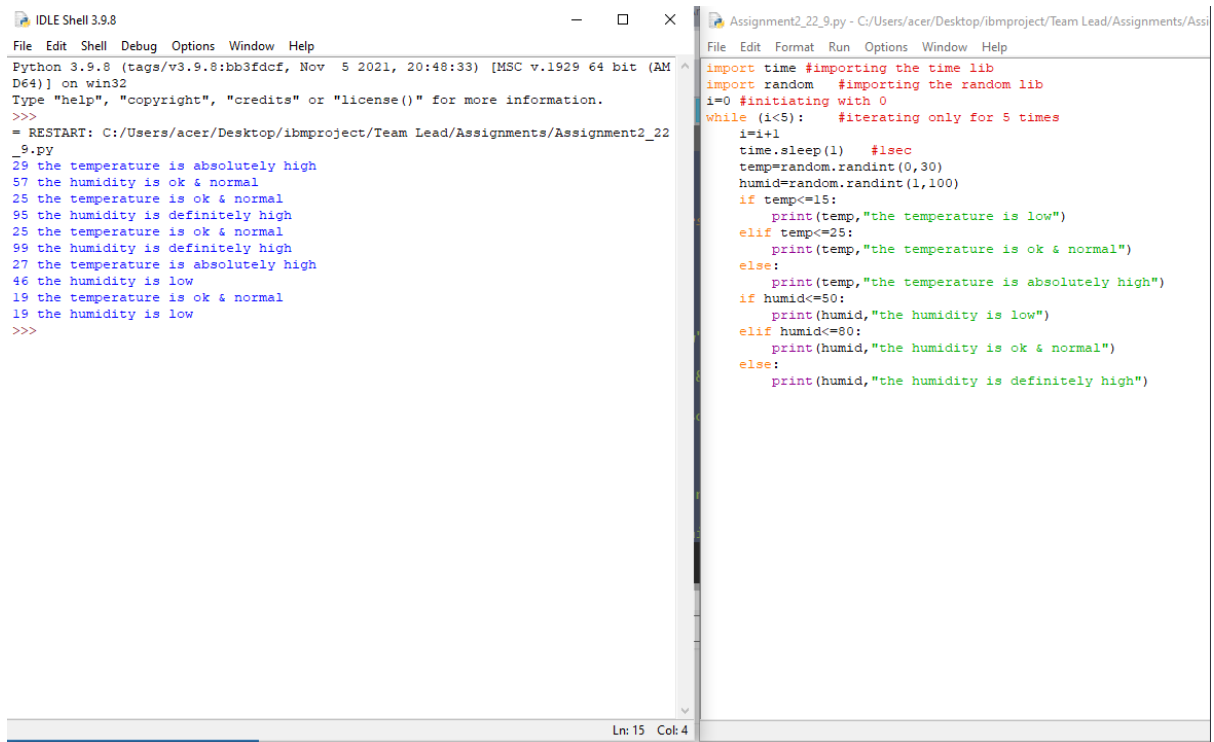
**Roll No:** 714019106035

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

**Code:**

```
import time
import random
i=0
while (i<5):
    i=i+1
    time.sleep(1) #1sec
    temp=random.randint(0,30)
    humid=random.randint(1,100)
    if temp<=15:
        print(temp,"Low Tempertature")
    elif temp<=25:
        print(temp,"Normal Temperature")
    else:
        print(temp,"High Temperature")
    if humid<=50:
        print(humid,"Low Humidity")
    elif humid<=80:
        print(humid,"Normal Humidity")
    else:
        print(humid,"High Humidity")
```

## Simulated Output:



The image shows two side-by-side windows from a Python IDE. The left window, titled 'IDLE Shell 3.9.8', displays the output of a Python script. It shows a restart of the shell and a series of 19 lines of output, each representing a sensor reading. The readings alternate between temperature and humidity, with values ranging from 'absolutely high' to 'low'. The right window, titled 'Assignment2\_22\_9.py - C:/Users/acer/Desktop/ibmproject/Team Lead/Assignments/Assi...', shows the source code of the script. The code imports the 'time' and 'random' modules, initializes a counter 'i' to 0, and enters a 'while' loop that runs 5 times. Inside the loop, it generates random temperature and humidity values and prints them with descriptive text based on their range. The code uses conditional statements to categorize the values as 'low', 'ok & normal', or 'absolutely high'.

```
File Edit Shell Debug Options Window Help
Python 3.9.8 (tags/v3.9.8:bb3fddf, Nov 5 2021, 20:48:33) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/acer/Desktop/ibmproject/Team Lead/Assignments/Assignment2_22_9.py
29 the temperature is absolutely high
57 the humidity is ok & normal
25 the temperature is ok & normal
95 the humidity is definitely high
25 the temperature is ok & normal
99 the humidity is definitely high
27 the temperature is absolutely high
46 the humidity is low
19 the temperature is ok & normal
19 the humidity is low
>>>
```

```
File Edit Format Run Options Window Help
Assignment2_22_9.py - C:/Users/acer/Desktop/ibmproject/Team Lead/Assignments/Assi
import time #importing the time lib
import random #importing the random lib
i=0 #initiating with 0
while (i<5): #iterating only for 5 times
    i=i+1
    time.sleep(1) #1sec
    temp=random.randint(0,30)
    humid=random.randint(1,100)
    if temp<=15:
        print(temp,"the temperature is low")
    elif temp<=25:
        print(temp,"the temperature is ok & normal")
    else:
        print(temp,"the temperature is absolutely high")
    if humid<=50:
        print(humid,"the humidity is low")
    elif humid<=80:
        print(humid,"the humidity is ok & normal")
    else:
        print(humid,"the humidity is definitely high")
```

Ln: 15 Col: 4