

ASSIGNMENT 2

Team ID: PNT2022TMID52298

Project Name: **Gas Leakage monitoring & Alerting system for Industries**

Submitted by **Ajishma C (963519106006)**

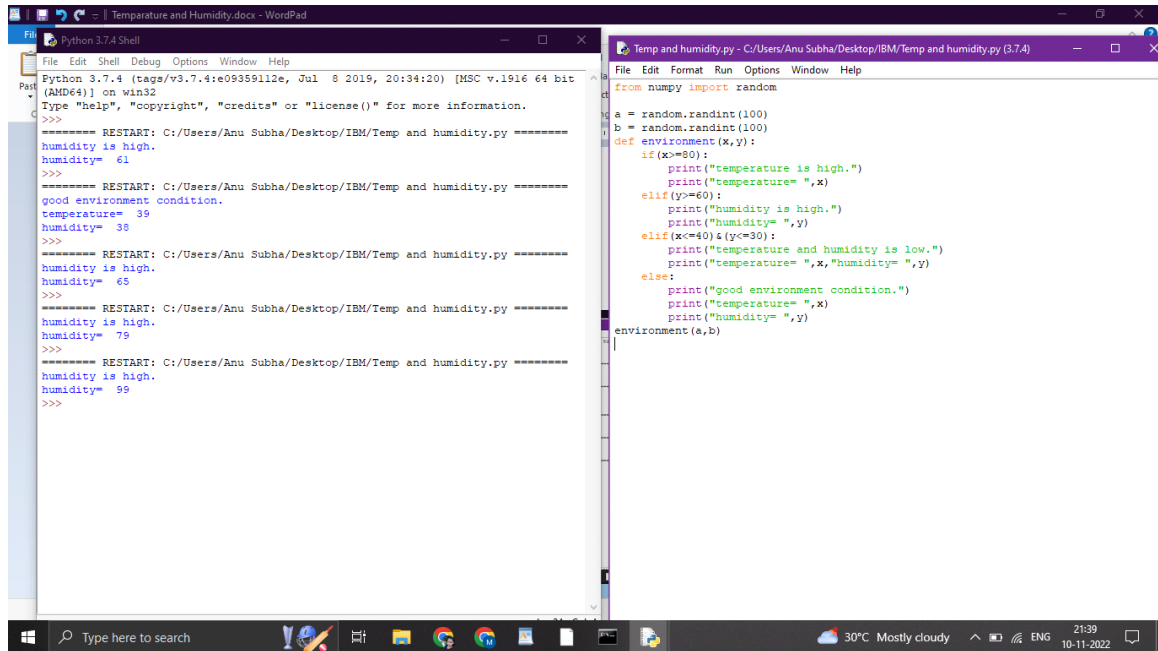
QUESTION: *Build a python code, Assume u get temperature and humidity values (generated with a random function to a variable) and write a condition to detect an alarm in case of high temperature continuously.*

Solution Code:

```
from numpy import random

a = random.randint(100)
b = random.randint(100)
def environment(x,y):
    if(x>=80):
        print("temperature is high.")
        print("temperature= ",x)
    elif(y>=60):
        print("humidity is high.")
        print("humidity= ",y)
    elif(x<=40)&(y<=30):
        print("temperature and humidity is low.")
        print("temperature= ",x,"humidity= ",y)
    else:
        print("good environment condition.")
        print("temperature= ",x)
        print("humidity= ",y)
environment(a,b)
```

OUTPUT:



```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:09359112e, Jul 8 2019, 20:34:20) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/Anu Subha/Desktop/IBM/Temp and humidity.py =====
humidity is high.
humidity= 61
>>>
===== RESTART: C:/Users/Anu Subha/Desktop/IBM/Temp and humidity.py =====
good environment condition.
temperature= 39
humidity= 38
>>>
===== RESTART: C:/Users/Anu Subha/Desktop/IBM/Temp and humidity.py =====
humidity is high.
humidity= 65
>>>
===== RESTART: C:/Users/Anu Subha/Desktop/IBM/Temp and humidity.py =====
humidity is high.
humidity= 79
>>>
===== RESTART: C:/Users/Anu Subha/Desktop/IBM/Temp and humidity.py =====
humidity is high.
humidity= 99
>>>
```

```
Temp and humidity.py - C:/Users/Anu Subha/Desktop/IBM/Temp and humidity.py (3.7.4)
File Edit Format Run Options Window Help
from numpy import random

a = random.randint(100)
b = random.randint(100)
def environment(x,y):
    if(x>=60):
        print("temperature is high.")
        print("temperature= ",x)
    elif(y>=60):
        print("humidity is high.")
        print("humidity= ",y)
    elif(x<=40 and y<=30):
        print("temperature and humidity is low.")
        print("temperature= ",x,"humidity= ",y)
    else:
        print("good environment condition.")
        print("temperature= ",x)
        print("humidity= ",y)
    environment(a,b)
```

Windows taskbar: Type here to search, 30°C Mostly cloudy, 21:39 10-11-2022