

ASSIGNMENT-2

NAME: HEMA PRIYA.P

REGISTER NUMBER: 811519106052

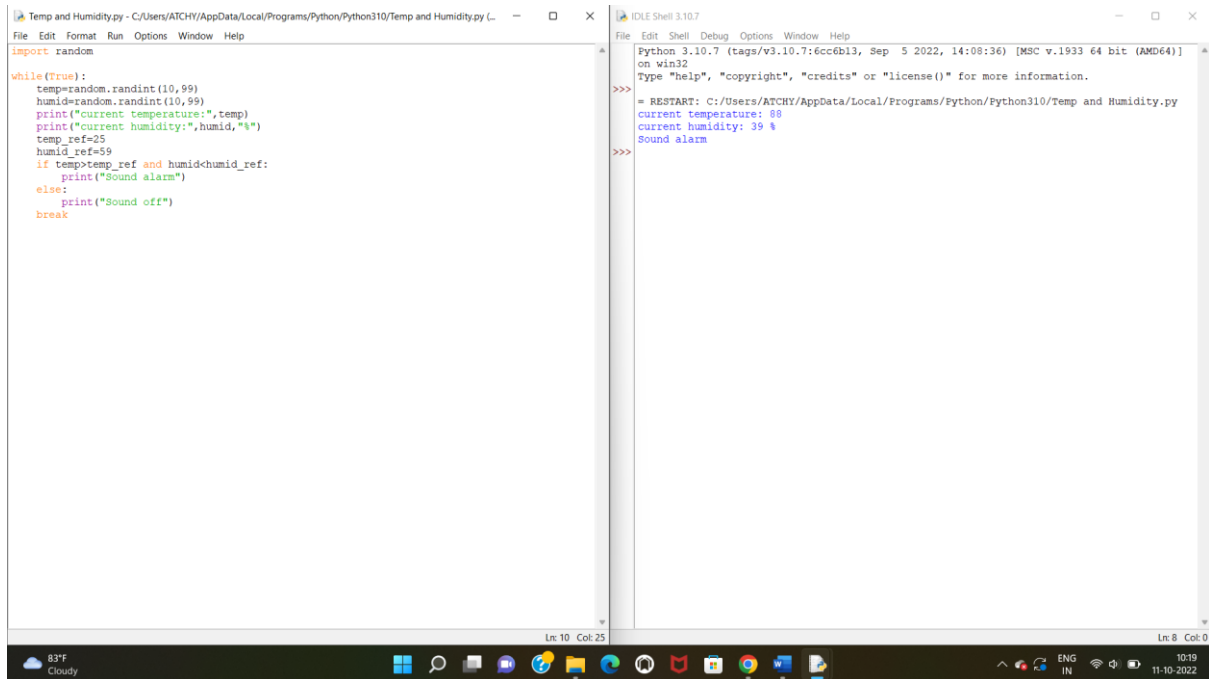
QUESTION:

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.

PROGRAM:

```
import random
while(True):
    temp=random.randint(10,99)
    humid=random.randint(10,99)
    print("current temperature:",temp)
    print("current humidity:",humid,"% ")
    temp_ref=25
    humid_ref=59
    if temp>temp_ref and humid<humid_ref:
        print("Sound alarm")
    else:
        print("Sound off")
    break
```

SCHEMATIC OUTPUT:



The image shows a screenshot of a Python IDE (IDLE 3.10.7) with a script titled "Temp and Humidity.py". The script is designed to monitor temperature and humidity using random values for simulation. It includes a while loop that prints the current temperature and humidity, and a conditional statement that triggers a "Sound alarm" if the temperature is greater than a reference value (25) and the humidity is greater than a reference value (59). The output window shows the execution results, including the current temperature (88) and current humidity (39 %), and a "Sound alarm" message.

```
Temp and Humidity.py - C:/Users/ATCHY/AppData/Local/Programs/Python/Python310/Temp and Humidity.py L...
File Edit Format Run Options Window Help
import random
while(True):
    temp=random.randint(10,99)
    humid=random.randint(10,99)
    print("current temperature:",temp)
    print("current humidity:",humid,"%")
    temp_ref=25
    humid_ref=59
    if temp>temp_ref and humid>humid_ref:
        print("Sound alarm")
    else:
        print("Sound off")
    break
```

```
IDLE Shell 3.10.7
File Edit Shell Debug Options Window Help
Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022, 14:08:36) [MSC v.1933 64 bit (AMD64)]
on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/ATCHY/AppData/Local/Programs/Python/Python310/Temp and Humidity.py
current temperature: 88
current humidity: 39 %
Sound alarm
>>>
```

Ln: 10 Col: 25

Ln: 8 Col: 0

83°F Cloudy

10:19 11-10-2022