

Assignment date	07 November 2022
Student Name	Ms.J.Sriji
Student Roll Number	821719106023
Maximum Marks	2 Marks

Question -2

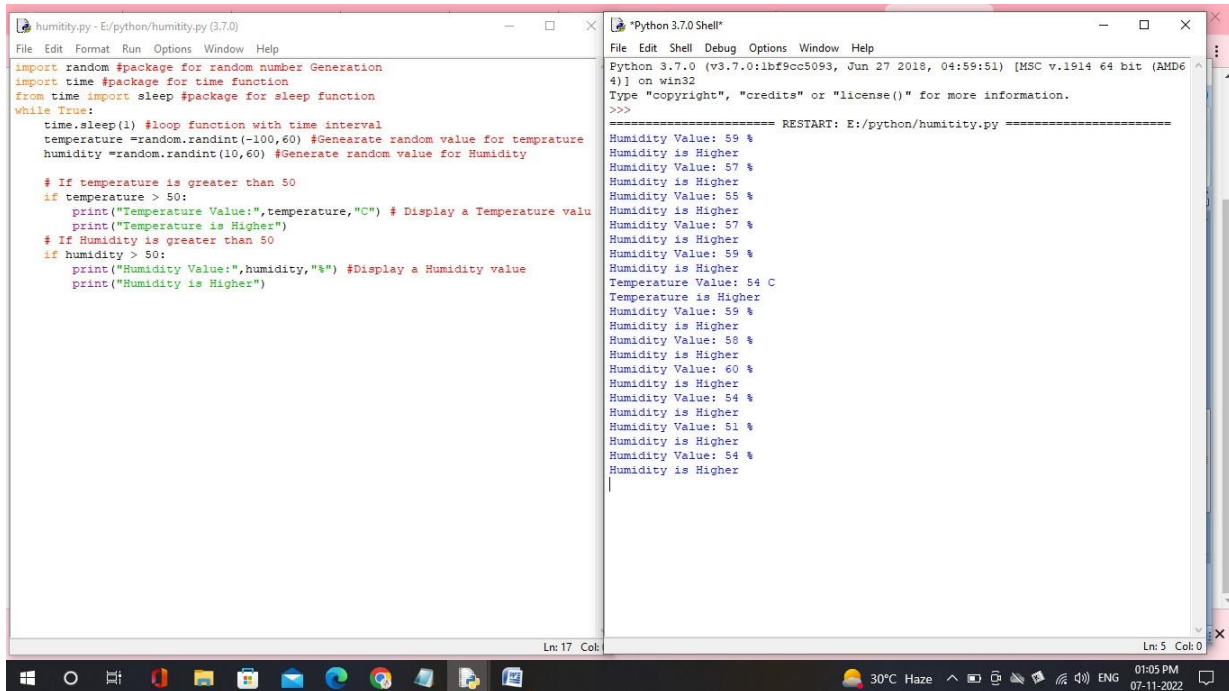
Build a python code, assume it get temperature and humidity values(generated with a random function to a variable) and write a condition to detect an alarm in case of high temperature continuously.

Code

```
import random #package for random number Generation
import time #package for time function
from time import sleep #package for sleep function
while True:
    time.sleep(1) #loop function with time interval
    temperature =random.randint(-100,60) #Generate random value for
temperature
    humidity =random.randint(10,60) #Generate random value for Humidity

    # If temperature is greater than 50
    if temperature > 50:
        print("Temperature Value:",temperature,"C") # Display a Temperature
value
        print("Temperature is Higher")
    # If Humidity is greater than 50
    if humidity > 50:
        print("Humidity Value:",humidity,"%") #Display a Humidity value
        print("Humidity is Higher")
```

Output



The image shows a screenshot of a Python 3.7.0 IDE with two windows. The left window, titled 'humidity.py - E:/python/humidity.py (3.7.0)', contains the following Python code:

```
import random #package for random number Generation
import time #package for time function
from time import sleep #package for sleep function
while True:
    time.sleep(1) #loop function with time interval
    temperature = random.randint(-100,60) #Generate random value for temperature
    humidity = random.randint(10,60) #Generate random value for Humidity

    # If temperature is greater than 50
    if temperature > 50:
        print("Temperature Value:",temperature,"C") # Display a Temperature value
        print("Temperature is Higher")
    # If Humidity is greater than 50
    if humidity > 50:
        print("Humidity Value:",humidity,"%") #Display a Humidity value
        print("Humidity is Higher")
```

The right window, titled '*Python 3.7.0 Shell*', shows the output of the script after a restart. The output is as follows:

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: E:/python/humidity.py =====
Humidity Value: 59 %
Humidity is Higher
Humidity Value: 57 %
Humidity is Higher
Humidity Value: 55 %
Humidity is Higher
Humidity Value: 57 %
Humidity is Higher
Humidity Value: 59 %
Humidity is Higher
Temperature Value: 54 C
Temperature is Higher
Humidity Value: 59 %
Humidity is Higher
Humidity Value: 58 %
Humidity is Higher
Humidity Value: 60 %
Humidity is Higher
Humidity Value: 54 %
Humidity is Higher
Humidity Value: 51 %
Humidity is Higher
Humidity Value: 54 %
Humidity is Higher
```

The taskbar at the bottom shows the system clock as 01:05 PM on 07-11-2022, and the weather as 30°C Haze.