Assignment -2

PYTHON PROGRAMMING

Assignment Date	19 September 2022
Student Name	**Ms.GAYATHRI S**
Student Roll Number	**911019106003**
Maximum Marks	2 Marks

Question-1:

Build a python code, Assume u 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

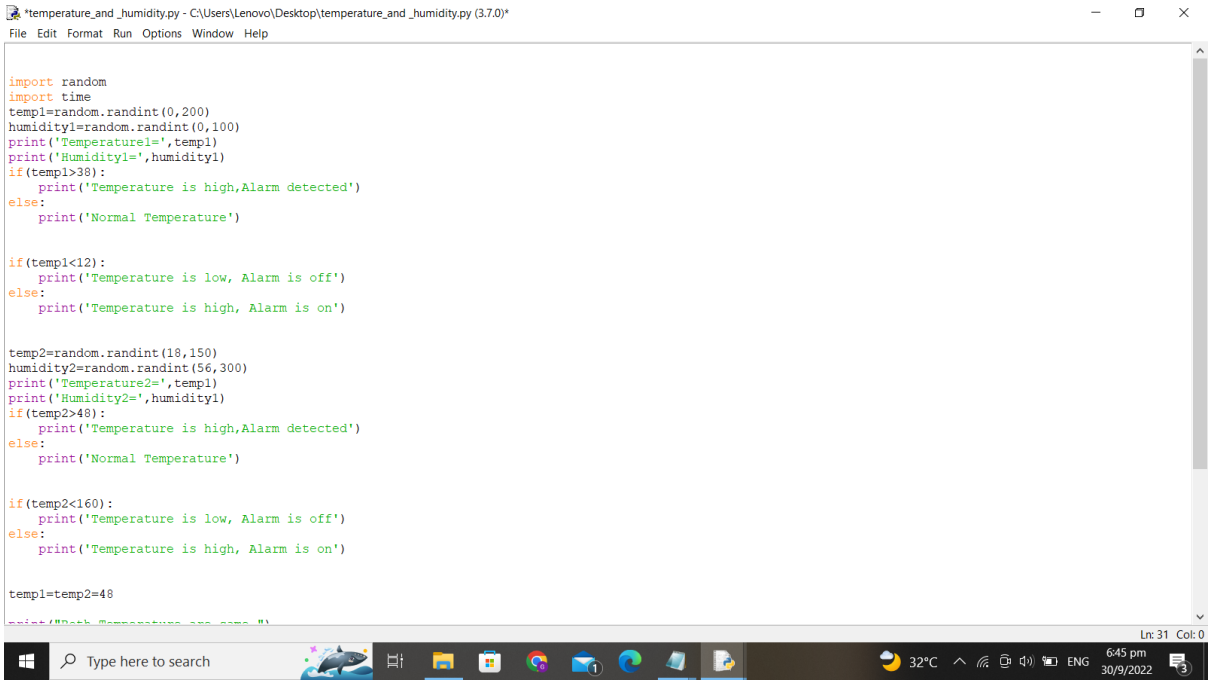
Solution:

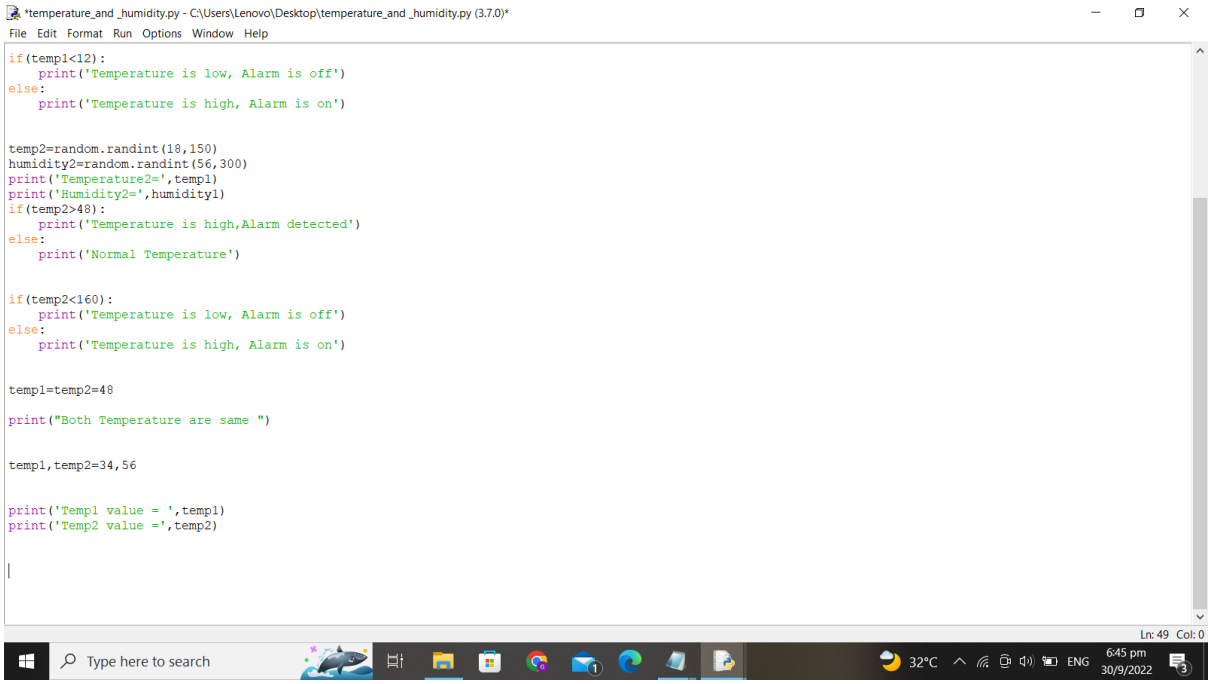
PROGRAM:

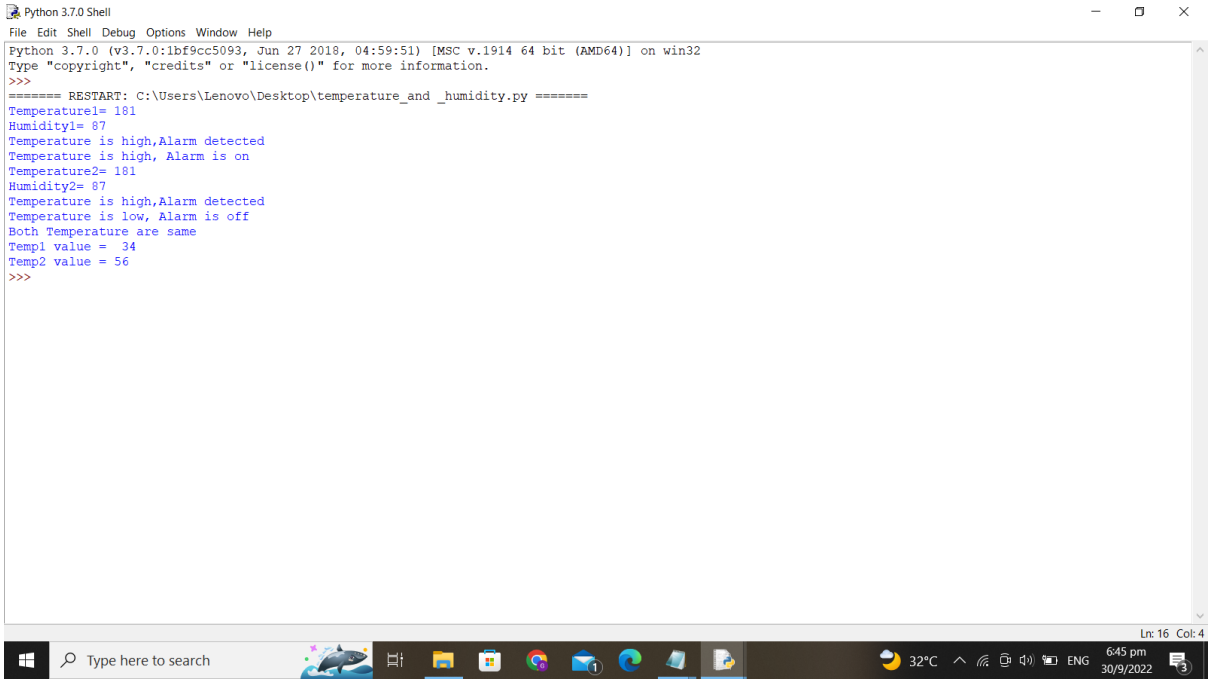
```
import random
import time
temp1=random.randint(0,200)
humidity1=random.randint(0,100)
print('Temperature1=',temp1)
print('Humidity1=',humidity1)
if(temp1>38):
    print('Temperature is high,Alarm detected')
else:
    print('Normal Temperature')


if(temp1<12):
    print('Temperature is low, Alarm is off')
else:
    print('Temperature is high, Alarm is on')
```

```
temp2=random.randint(18,150)
humidity2=random.randint(56,300)
print('Temperature2=',temp1)
print('Humidity2=',humidity1)
if(temp2>48):
    print('Temperature is high,Alarm detected')
else:
    print('Normal Temperature')


if(temp2<160):
    print('Temperature is low, Alarm is off')
else:
    print('Temperature is high, Alarm is on')
temp1=temp2=48
print("Both Temperature are same ")
temp1,temp2=34,56
print('Temp1 value = ',temp1)
print('Temp2 value =',temp2)
```

OUTPUT:


temperature_and _humidity.py - C:\Users\Lenovo\Desktop\temperature_and _humidity.py (3.7.0)
File Edit Format Run Options Window Help
import random
import time
temp1=random.randint(0,200)
humidity1=random.randint(0,100)
print('Temperature1=',temp1)
print('Humidity1=',humidity1)
if(temp1>38):
print('Temperature is high,Alarm detected')
else:
print('Normal Temperature')
if(temp1<12):
print('Temperature is low, Alarm is off')
else:
print('Temperature is high, Alarm is on')
temp2=random.randint(18,150)
humidity2=random.randint(56,300)
print('Temperature2=',temp1)
print('Humidity2=',humidity1)
if(temp2>48):
print('Temperature is high,Alarm detected')
else:
print('Normal Temperature')
if(temp2<160):
print('Temperature is low, Alarm is off')
else:
print('Temperature is high, Alarm is on')
temp1=temp2=48
Ln: 31 Col: 0
Type here to search
32°C
ENG
6:45 pm
30/9/2022


temperature_and _humidity.py - C:\Users\Lenovo\Desktop\temperature_and _humidity.py (3.7.0)
File Edit Format Run Options Window Help
if(temp1<12):
print('Temperature is low, Alarm is off')
else:
print('Temperature is high, Alarm is on')
temp2=random.randint(18,150)
humidity2=random.randint(56,300)
print('Temperature2=',temp1)
print('Humidity2=',humidity1)
if(temp2>48):
print('Temperature is high,Alarm detected')
else:
print('Normal Temperature')
if(temp2<160):
print('Temperature is low, Alarm is off')
else:
print('Temperature is high, Alarm is on')
temp1=temp2=48
print("Both Temperature are same ")
temp1,temp2=34,56
print('Temp1 value = ',temp1)
print('Temp2 value =',temp2)
Ln: 49 Col: 0
Type here to search
32°C
ENG
6:45 pm
30/9/2022


Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
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: C:\Users\Lenovo\Desktop\temperature_and _humidity.py =======
Temperature1= 181
Humidity1= 87
Temperature is high,Alarm detected
Temperature is high, Alarm is on
Temperature2= 181
Humidity2= 87
Temperature is high,Alarm detected
Temperature is low, Alarm is off
Both Temperature are same
Temp1 value = 34
Temp2 value = 56
>>>
Ln: 16 Col: 4
Type here to search
32°C
ENG
6:45 pm
30/9/2022