Assignment -2

Python Programming

Assignment Date	28 September 2022
Student Name	JAYA SREE C T
Student Roll Number	962819106018
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                          #for generating random values
temp=random.uniform(10,100)  #assign random temperature value
humid=random.randrange(20,100,1)
#assign random     humidity value
temp=round(temp,2)              #rounding to 2 decimal   points
print("Temperature:",temp,"`C")


"""         TEMPERATURE     """

if (temp<=20):                          #temperature decision
    print("Alarm")
    print("very low temperature")
elif ((temp>20)and(temp<38)):
    print("Moderate temperature")
```

```
else:
    print("Alarm")
    print("Very high temperature")

print("Humidity:",humid,"%")

"""     HUMIDITY     """

if (humid<=30):                          #humidity decision
    print("Alarm")
    print("Very Low humidity")
elif((humid>30)and(humid<50)):
    print("Moderate humidity")
else:
    print("Alarm")
    print("Very High humidity")
```

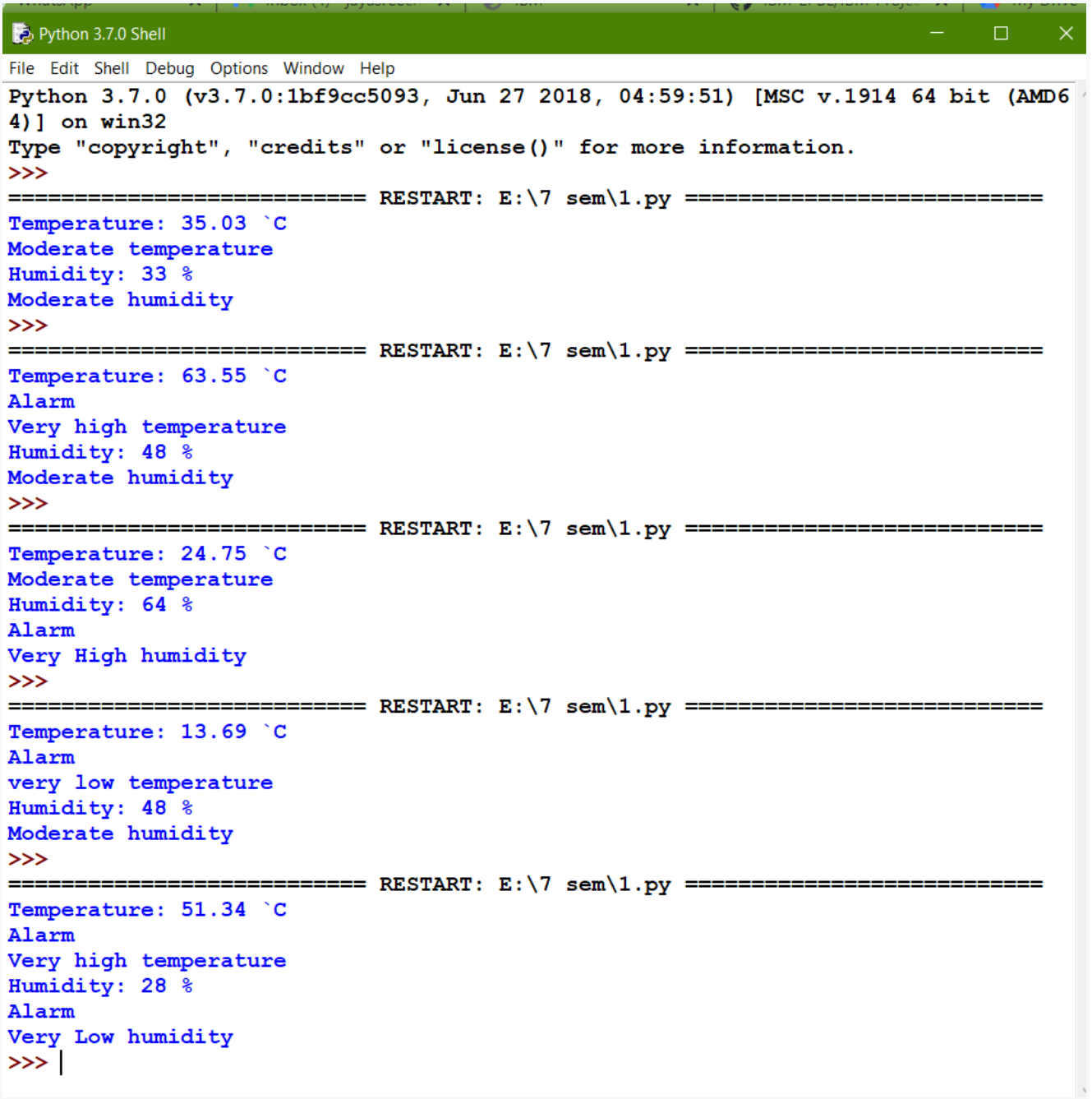
Code:

1.py - E:\7 sem\1.py (3.7.0)

File Edit Format Run Options Window Help

```
import random                          #for generating random values
temp=random.uniform(10,100)            #assign random temperature value
humid=random.randrange(20,100,1)       #assign random humidity value
temp=round(temp,2)                     #rounding to 2 decimal points
print("Temperature:",temp,"`C")


"""         TEMPERATURE     """

if (temp<=20):                           #temperature decision
    print("Alarm")
    print("very low temperature")
elif ((temp>20)and(temp<38)):
    print("Moderate temperature")
else:
    print("Alarm")
    print("Very high temperature")

print("Humidity:",humid,"%")

"""      HUMIDITY      """

if (humid<=30):                          #humidity decision
    print("Alarm")
    print("Very Low humidity")
elif((humid>30)and(humid<50)):
    print("Moderate humidity")
else:
    print("Alarm")
    print("Very High humidity")
```

Output:


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: E:\7 sem\1.py ==========
Temperature: 35.03 `C
Moderate temperature
Humidity: 33 %
Moderate humidity
>>>
========== RESTART: E:\7 sem\1.py ==========
Temperature: 63.55 `C
Alarm
Very high temperature
Humidity: 48 %
Moderate humidity
>>>
========== RESTART: E:\7 sem\1.py ==========
Temperature: 24.75 `C
Moderate temperature
Humidity: 64 %
Alarm
Very High humidity
>>>
========== RESTART: E:\7 sem\1.py ==========
Temperature: 13.69 `C
Alarm
very low temperature
Humidity: 48 %
Moderate humidity
>>>
========== RESTART: E:\7 sem\1.py ==========
Temperature: 51.34 `C
Alarm
Very high temperature
Humidity: 28 %
Alarm
Very Low humidity
>>>