

Assignment -1
Python Programming

Assignment Date	25 September 2022
Student Name	B.Raghul
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Maximum Marks	2 Marks

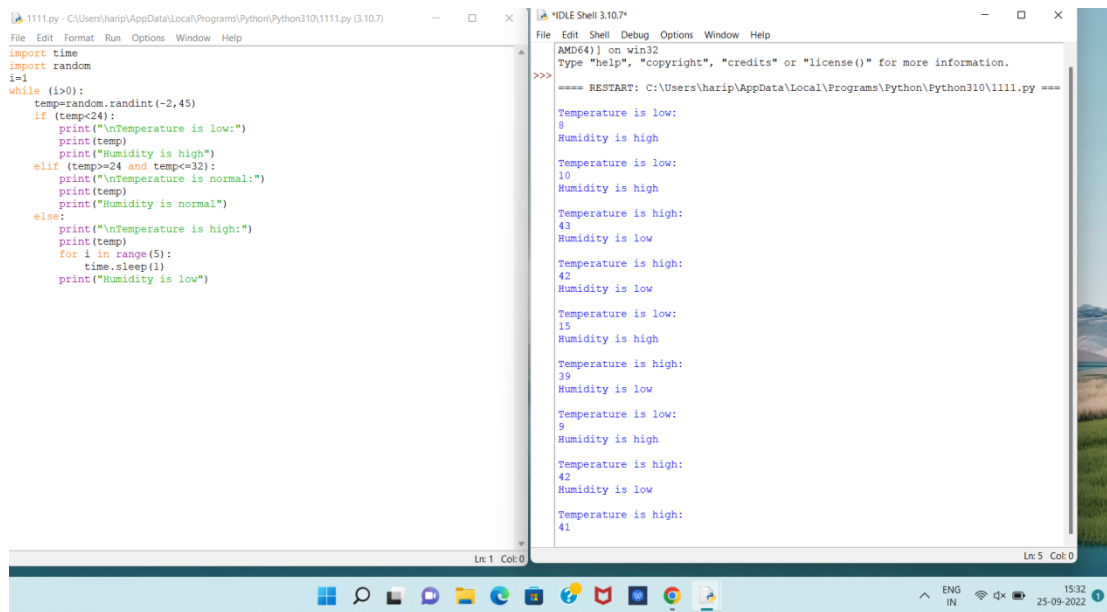
Question-1:

Build a python code, assume you get temperature and humidity values (Generated with random functions to variable) and write a condition to continuously detect alarm in case of high temperature.

Solution:

import time
import random
i=1
while (i>0):
temp=random.randint(-2,45)
if (temp<24):
print("\nTemperature is low:")
print(temp)
print("Humidity is high")
elif (temp>=24 and temp<=32):
print("\nTemperature is normal:")
print(temp)
print("Humidity is normal")
else:
print("\nTemperature is high:")
print(temp)
for i in range(5):
time.sleep(1)
print("Humidity is low")

OUTPUT:



The screenshot shows a Python IDE with two windows. The left window, titled '1111.py', contains a Python script that generates random temperature and humidity values and prints them. The right window, titled 'IDLE Shell 3.10.7', shows the output of the script, which consists of multiple lines of 'Temperature is low:' and 'Humidity is high:' messages, each followed by a numerical value. The script in the left window is as follows:

```
1111.py - C:\Users\harip\AppData\Local\Programs\Python\Python310\1111.py (3.10.7)
File Edit Format Run Options Window Help
import time
import random
i=1
while (i>0):
    temp=random.randint(-2,45)
    if (temp<24):
        print("\nTemperature is low:")
        print(temp)
        print("Humidity is high")
    elif (temp>=24 and temp<=32):
        print("\nTemperature is normal:")
        print(temp)
        print("Humidity is normal")
    else:
        print("\nTemperature is high:")
        print(temp)
        for i in range(5):
            time.sleep(1)
            print("Humidity is low")
```

The output in the right window is as follows:

```
IDLE Shell 3.10.7
File Edit Shell Debug Options Window Help
AMD64) on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
==== RESTART: C:\Users\harip\AppData\Local\Programs\Python\Python310\1111.py ====
Temperature is low:
8
Humidity is high
Temperature is low:
10
Humidity is high
Temperature is high:
43
Humidity is low
Temperature is high:
42
Humidity is low
Temperature is low:
15
Humidity is high
Temperature is high:
39
Humidity is low
Temperature is low:
9
Humidity is high
Temperature is high:
42
Humidity is low
Temperature is high:
41
```

The taskbar at the bottom shows the Windows Start button, search icon, and several application icons. The system tray on the right indicates the language is set to 'ENG IN', the date is '25-09-2022', and the time is '15:32'.