

Assignment -2

Python Programming

Assignment Date	28 September 2022
Student Name	J.JEYANTHI
Student Roll Number	962819106023
Maximum Marks	2 Marks

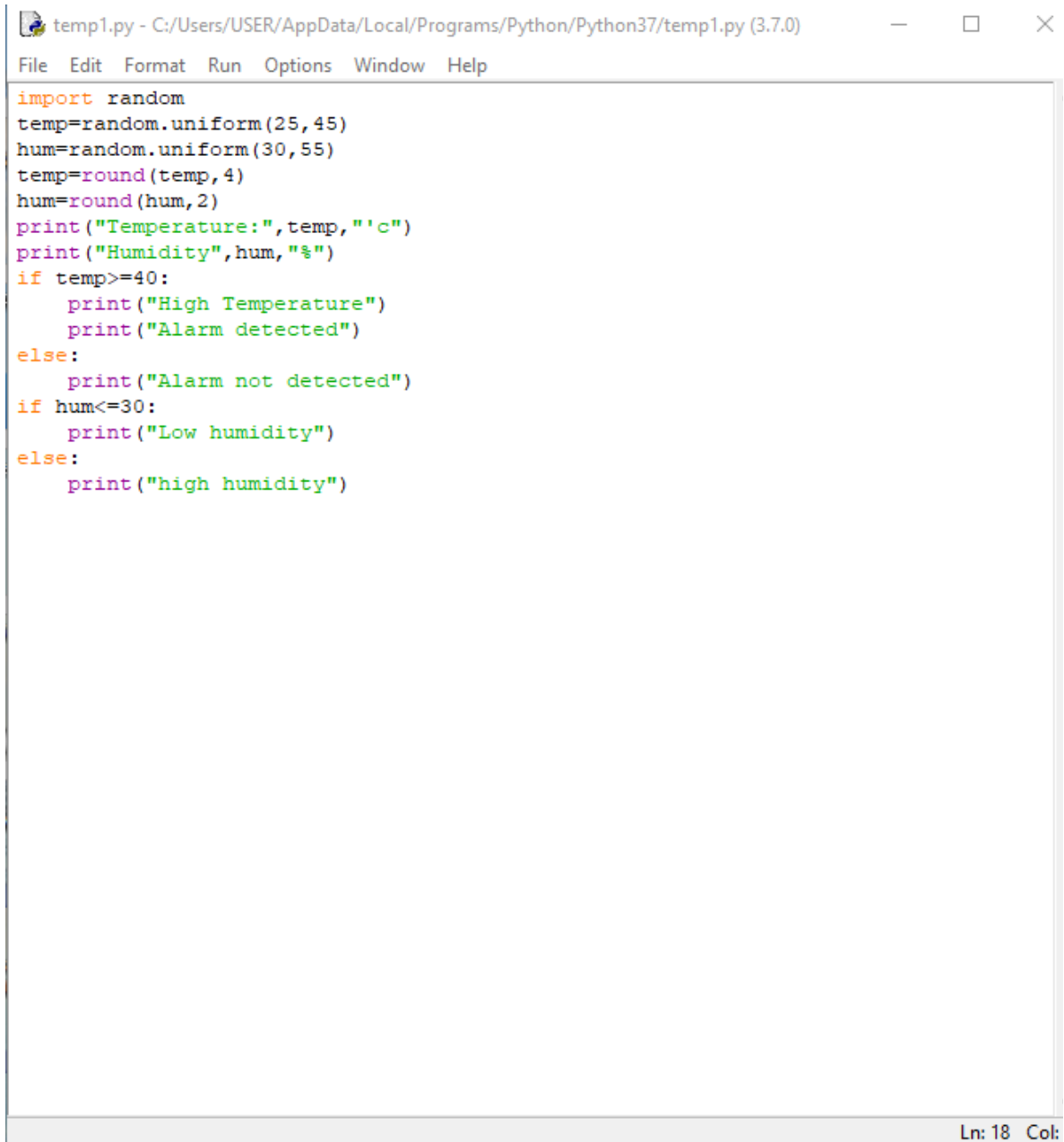
Question-1:

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:

```
import random
temp=random.uniform(25,45)
hum=random.uniform(30,55)
temp=round(temp,4)
hum=round(hum,2)
print("Temperature:",temp,"c")
print("Humidity",hum,"%")
if temp>=40:
    print("High Temperature")
    print("Alarm detected")
else:
    print("Alarm not detected")
if hum<=30:
    print("Low humidity")
else:
    print("high humidity")
```

Code:



The image shows a screenshot of a Python IDE window titled "temp1.py - C:/Users/USER/AppData/Local/Programs/Python/Python37/temp1.py (3.7.0)". The window has a menu bar with "File", "Edit", "Format", "Run", "Options", "Window", and "Help". The main text area contains the following Python code:

```
import random
temp=random.uniform(25,45)
hum=random.uniform(30,55)
temp=round(temp,4)
hum=round(hum,2)
print("Temperature:",temp,"°c")
print("Humidity",hum,"%")
if temp>=40:
    print("High Temperature")
    print("Alarm detected")
else:
    print("Alarm not detected")
if hum<=30:
    print("Low humidity")
else:
    print("high humidity")
```

The status bar at the bottom right indicates "Ln: 18 Col:".

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 (AMD 64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
=== RESTART: C:/Users/USER/AppData/Local/Programs/Python/Python37/templ.py ===
Temperature: 31.1002 'c
Humidity 44.31 %
Alarm not detected
high humidity
>>>
=== RESTART: C:/Users/USER/AppData/Local/Programs/Python/Python37/templ.py ===
Temperature: 42.7001 'c
Humidity 36.13 %
High Temperature
Alarm detected
high humidity
>>>
=== RESTART: C:/Users/USER/AppData/Local/Programs/Python/Python37/templ.py ===
Temperature: 29.1803 'c
Humidity 31.99 %
Alarm not detected
high humidity
>>>
=== RESTART: C:/Users/USER/AppData/Local/Programs/Python/Python37/templ.py ===
Temperature: 27.0594 'c
Humidity 50.16 %
Alarm not detected
high humidity
>>>
=== RESTART: C:/Users/USER/AppData/Local/Programs/Python/Python37/templ.py ===
Temperature: 29.7044 'c
Humidity 34.82 %
Alarm not detected
high humidity
>>>
=== RESTART: C:/Users/USER/AppData/Local/Programs/Python/Python37/templ.py ===
Temperature: 36.9633 'c
Humidity 38.9 %
Alarm not detected
high humidity
Ln: 70 Col: 4
```