

IBM ASSIGNMENT – 2

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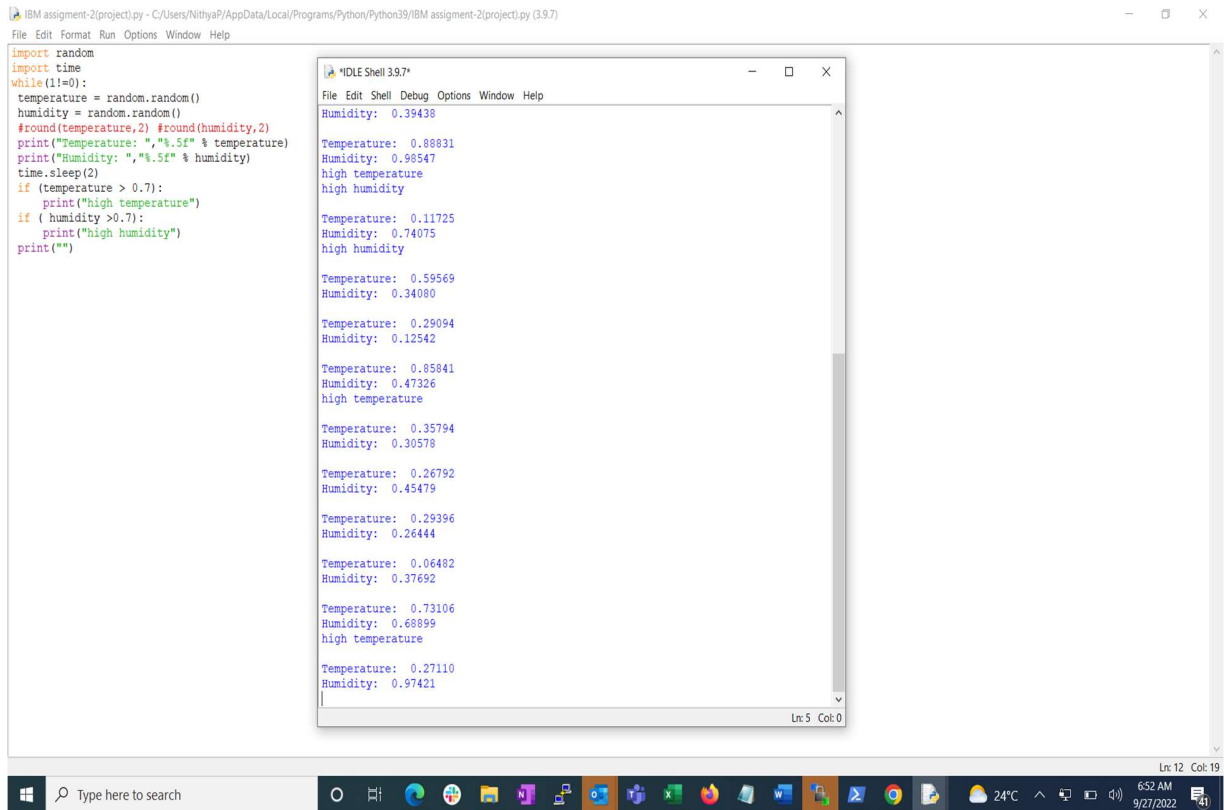
ASSIGNMENT QUESTION

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.

PYTHON CODE:

```
import random
import time
while(1!=0):
    temperature = random.random()
    humidity = random.random()
    #round(temperature,2) #round(humidity,2)
    ("print Temperature: ", "%.5f" % temperature)
    print("Humidity: ", "%.5f" % humidity)
    time.sleep(2)
    if (temperature > 0.7):
        print("high temperature")
    if ( humidity >0.7):
        print("high humidity")
    print("")
```

EXECUTION RESULT



The screenshot shows a Python script being executed in IDLE 3.9.7. The script is located at `C:/Users/NithyaP/AppData/Local/Programs/Python/Python39/IBM assignment-2(project).py (3.9.7)`. The script's logic is as follows:

```
import random
import time
while(1!=0):
    temperature = random.random()
    humidity = random.random()
    #round(temperature,2) #round(humidity,2)
    print("Temperature: ", "%.5f" % temperature)
    print("Humidity: ", "%.5f" % humidity)
    time.sleep(2)
    if (temperature > 0.7):
        print("high temperature")
    if (humidity > 0.7):
        print("high humidity")
    print("")
```

The output window, titled "IDLE Shell 3.9.7", displays the results of the script's execution. It shows a series of random values for temperature and humidity, with some values exceeding 0.7, which triggers the "high temperature" or "high humidity" messages. The output is as follows:

```
Humidity: 0.39438
Temperature: 0.88831
Humidity: 0.88547
high temperature
high humidity

Temperature: 0.11725
Humidity: 0.74075
high humidity

Temperature: 0.59569
Humidity: 0.34080

Temperature: 0.29094
Humidity: 0.12542

Temperature: 0.85841
Humidity: 0.47326
high temperature

Temperature: 0.35794
Humidity: 0.30578

Temperature: 0.26792
Humidity: 0.45479

Temperature: 0.29396
Humidity: 0.26444

Temperature: 0.06482
Humidity: 0.37692

Temperature: 0.73106
Humidity: 0.68899
high temperature

Temperature: 0.27110
Humidity: 0.97421
```

The taskbar at the bottom of the screen shows the system clock as 6:52 AM on 9/27/2022, and the temperature as 24°C.