

Assignment -2

Python Programming

Assignment Date	28 September 2022
Student Name	SHAIMA M
Student Roll Number	962819106039
Maximum Marks	2 Marks

Question-1:

Build a python code, assume you 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

tem=random.uniform(10,55)
hum=random.randint(1,100)
print("Temperature : %.2f C"%(tem))
print("Humidity : %d%%"%(hum))
alarm=0
if (tem>27):
    print("High temperature")
    alarm=1
if (hum<30):
    print("Low humidity")
    alarm=1
elif(hum>50):
    print("High humidity")
    alarm=1
if(alarm==1):
    print("Alarm ON")
```

```
assignment-2.py - C:\Users\hp\AppData\Local\Programs\Python\Python37\assignment-2.py
File Edit Format Run Options Window Help
import random
tem=random.uniform(10,55)
hum=random.randint(1,100)
print("Temperature : %.2f C"%(tem))
print("Humidity : %d%%"%(hum))
alarm=0
if (tem>27):
    print("High temperature")
    alarm=1
if (hum<30):
    print("Low humidity")
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elif (hum>50):
    print("High humidity")
    alarm=1
if (alarm==1):
    print("Alarm ON")

Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
>>>
RESTART: C:\Users\hp\AppData\Local\Programs\Python\Python37\assignment-2.py
Temperature : 20.86 C
Humidity : 86%
High humidity
Alarm ON
>>>
RESTART: C:\Users\hp\AppData\Local\Programs\Python\Python37\assignment-2.py
Temperature : 42.50 C
Humidity : 18%
High temperature
Low humidity
Alarm ON
>>>
RESTART: C:\Users\hp\AppData\Local\Programs\Python\Python37\assignment-2.py
Temperature : 44.15 C
Humidity : 94%
High temperature
High humidity
Alarm ON
>>>
RESTART: C:\Users\hp\AppData\Local\Programs\Python\Python37\assignment-2.py
Temperature : 28.98 C
Humidity : 50%
High temperature
Alarm ON
>>>
RESTART: C:\Users\hp\AppData\Local\Programs\Python\Python37\assignment-2.py
Temperature : 51.37 C
Humidity : 19%
High temperature
Low humidity
Alarm ON
>>>
RESTART: C:\Users\hp\AppData\Local\Programs\Python\Python37\assignment-2.py
Temperature : 11.60 C
Humidity : 1%
Low humidity
Alarm ON
>>>
RESTART: C:\Users\hp\AppData\Local\Programs\Python\Python37\assignment-2.py
Temperature : 11.80 C
Humidity : 33%
>>>
```