

Assignment -2

Python Programming

Assignment Date	24 September 2022
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Maximum Marks	2 Marks

Question-1:

Build a python code, assume u get a 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

Import time

While True:

 Temperature=random.randint(0,150)

 Humidity=random.randint(0,100)

 If Temperature>100 and Humidity>80:

 print("Temperature:"+str(Temperature))

 print("Humidity:"+str(Humidity))

 print("Alarm On!!")

 print(" ")

 time.sleep(2)

 else:

 print("Temperature:"+str(Temperature))

 print("Humidity:"+str(Humidity))

 print("Range is Normal")

 print(" ")

Assignment 2.py - C:\Users\ELCOT\Desktop\Assignment 2.py (3.10.7)

File Edit Format Run Options Window Help

```
import random
import time
while True:
    Temperature = random.randint(0,150)
    Humidity = random.randint(0,100)

    if Temperature > 100 and Humidity > 80:
        print("Temperature : " + str(Temperature))
        print("Humidity : " + str(Humidity))
        print("Temperature and Humidity is High")
        print("Alarm On !!!")
        print(" ")
        time.sleep(2)
    else:
        print("Temperature : " + str(Temperature))
        print("Humidity : " + str(Humidity))
        print("Range is Normal")
        print(" ")
```

IDLE Shell 3.10.7*

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Python 3.10.7 (tags/v3.10.7:6cc0b13, Sep 5 2022, 14:08:36) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>>

```
===== RESTART: C:\Users\ELCOT\Desktop\Assignment 2.py =====
Temperature : 66
Humidity : 95
Range is Normal

Temperature : 100
Humidity : 52
Range is Normal

Temperature : 64
Humidity : 1
Range is Normal

Temperature : 103
Humidity : 77
Range is Normal

Temperature : 9
Humidity : 46
Range is Normal

Temperature : 88
Humidity : 17
Range is Normal

Temperature : 127
Humidity : 82
Temperature and Humidity is High
Alarm On !!!

|
```

Range is Normal

Temperature : 80

Humidity : 83

Range is Normal

Temperature : 125

Humidity : 30

Range is Normal

Temperature : 139

Humidity : 7

Range is Normal

Temperature : 2

Humidity : 18

Range is Normal

Temperature : 24

Humidity : 29

Range is Normal

Temperature : 18

Humidity : 88

Range is Normal

Temperature : 143

Humidity : 39

Range is Normal

Temperature : 14

Humidity : 63

Range is Normal

Temperature : 111

Humidity : 96

Temperature and Humidity is High

Alarm On !!!