

Assignment - 2

Student Name	Ganesh kumar .S
Student Roll Number	92172019108013
Maximum Marks	2 Marks

Question :

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 .

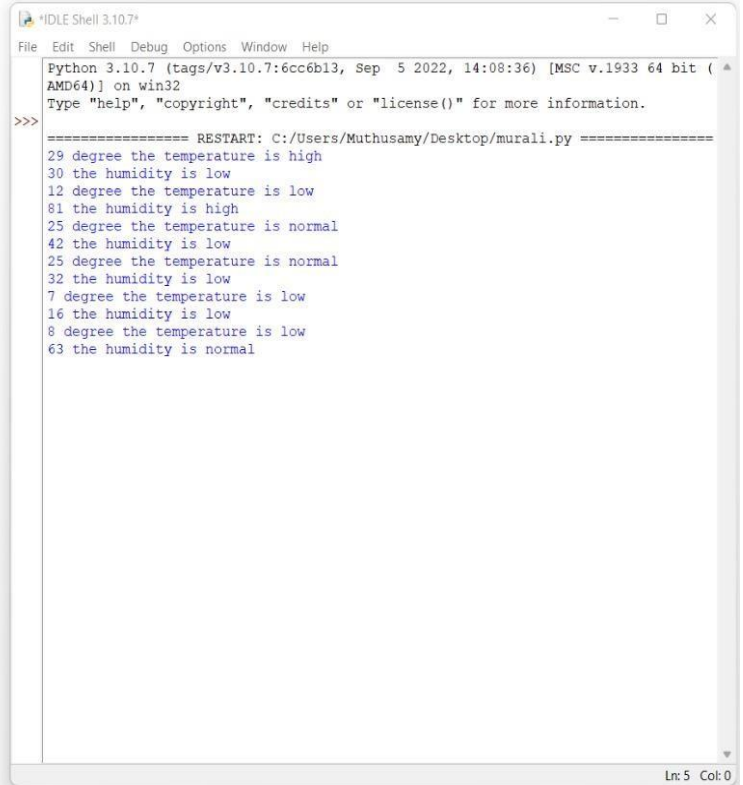
Solution :

```
import time
i=0
While (i<=1440):
    i=i+1
    time.sleep(10)
    import random
    temp=random.randint(0,30)
    humid=random.randint(1,1000)if
    temp<=15:
        print (temp,"degree the temperature is low")
    elif temp<=25:
        print (temp,"degree the temperature is normal")
    else:
        print (temp,"degree the temperature is high")if
    humid<=50:
        print (humid,"the humidity is low")
    elif humid<=80:
        print (humid,"the humidity is normal")
    else:
        print (humid,"the humidity is high")
```

Output:

```
import time
i=0
while (i<=1440):
    i=i+1
    time.sleep(10)

    import random
    temp=random.randint(0,30)
    humid=random.randint(1,100)
    if temp<=15:
        print (temp, "degree the temperature is low")
    elif temp<=25:
        print (temp, "degree the temperature is normal")
    else:
        print (temp, "degree the temperature is high")
    if humid<=50:
        print (humid, "the humidity is low")
    elif humid<=80:
        print (humid, "the humidity is normal")
    else:
        print (humid, "the humidity is high")
```



The screenshot shows an IDLE Shell window titled "IDLE Shell 3.10.7". The window contains the output of the Python script, which is a list of 1440 lines of data. The data is organized into pairs of temperature and humidity readings, separated by a line of 1440 equals signs. The first line of data is "29 degree the temperature is high", followed by "30 the humidity is low". The second line of data is "12 degree the temperature is low", followed by "81 the humidity is high". The third line of data is "25 degree the temperature is normal", followed by "42 the humidity is low". The fourth line of data is "25 degree the temperature is normal", followed by "32 the humidity is low". The fifth line of data is "7 degree the temperature is low", followed by "16 the humidity is low". The sixth line of data is "8 degree the temperature is low", followed by "63 the humidity is normal". The window also shows the Python version (3.10.7) and the file path (C:/Users/Muthusamy/Desktop/murali.py).

```
Python 3.10.7 (tags/v3.10.7:6cc6b13, 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/Muthusamy/Desktop/murali.py =====
29 degree the temperature is high
30 the humidity is low
12 degree the temperature is low
81 the humidity is high
25 degree the temperature is normal
42 the humidity is low
25 degree the temperature is normal
32 the humidity is low
7 degree the temperature is low
16 the humidity is low
8 degree the temperature is low
63 the humidity is normal
```

