

Assignment -2

Python Programming

Assignment Date	19 September 2022
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Student Roll Number	621119106022
Maximum Marks	2 Marks

Question:

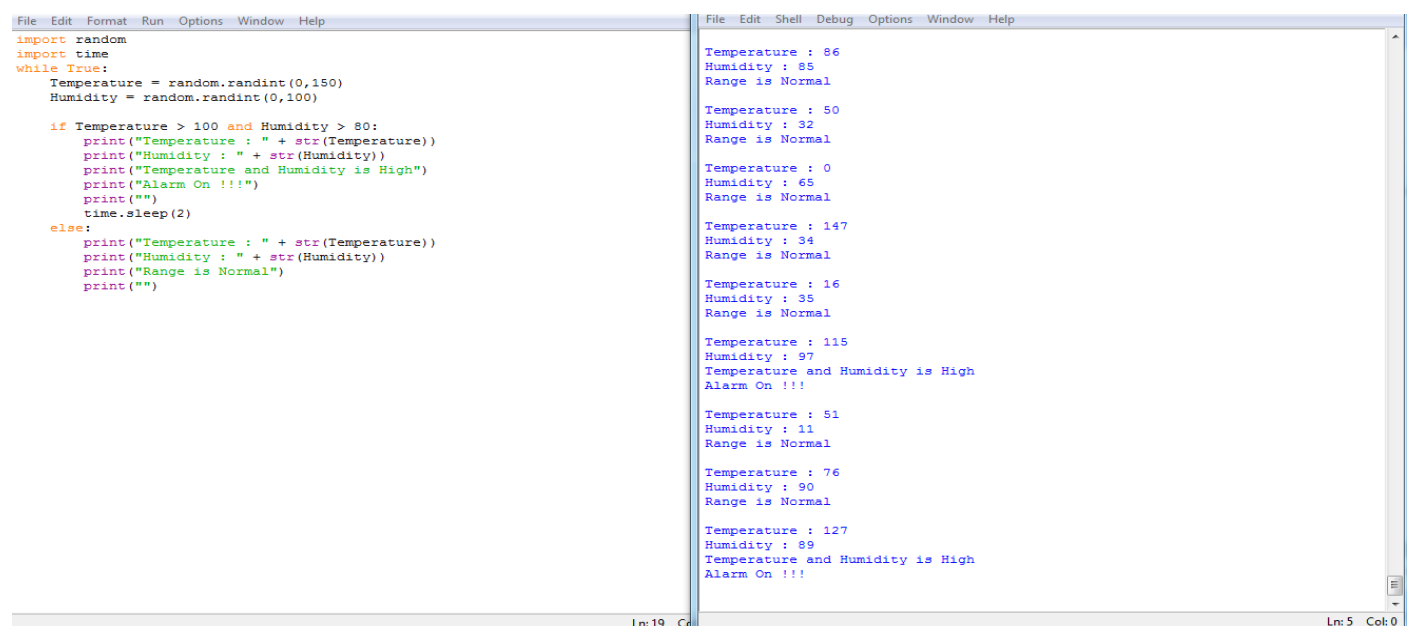
Build a python code, Assume u get temperature and humidity values (generated with random function to a variable) and write a condition to continuously detect alarm in case of high temperature.

Solution:

PROGRAM:

```
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("")
```

OUTPUT:



The screenshot shows a Python IDE with two panes. The left pane contains the Python code for generating random temperature and humidity values and checking for high values. The right pane shows the output of the program, which displays the generated values and whether the range is normal or high, with an alarm triggered when both are high.

```
File Edit Format Run Options Window Help
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import time
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    if Temperature > 100 and Humidity > 80:
        print("Temperature : " + str(Temperature))
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        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("")
```

```
Temperature : 86
Humidity : 85
Range is Normal

Temperature : 50
Humidity : 32
Range is Normal

Temperature : 0
Humidity : 65
Range is Normal

Temperature : 147
Humidity : 34
Range is Normal

Temperature : 16
Humidity : 35
Range is Normal

Temperature : 115
Humidity : 97
Temperature and Humidity is High
Alarm On !!!

Temperature : 51
Humidity : 11
Range is Normal

Temperature : 76
Humidity : 90
Range is Normal

Temperature : 127
Humidity : 89
Temperature and Humidity is High
Alarm On !!!
```

Ln: 19 Col: 4

Ln: 5 Col: 0