Assignment -2

Temperature and humidity

Date	29 September 2022
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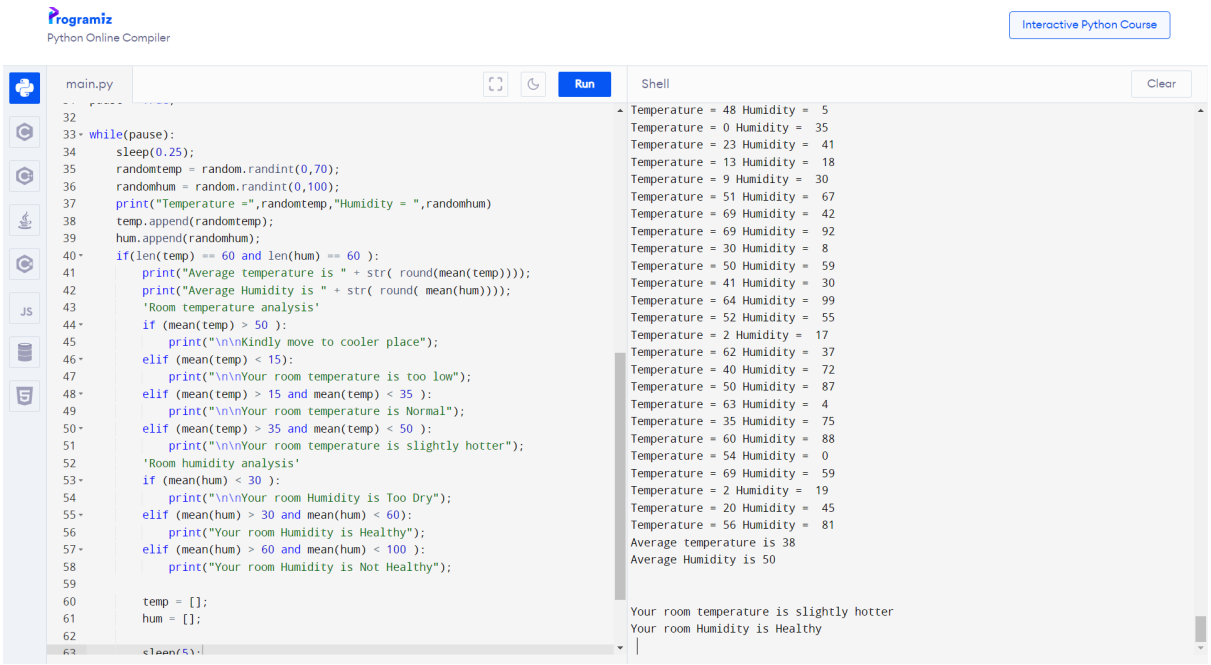
Maximum Marks	2 Marks

Question-1:

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

Output :



Code And ScreenShot

Python Code :

'''

Assignment 2:

Build a python code, Assume u get temperature and humidity values (generated with a random function to a variable) and write a condition to detect an

alarm in case of high temperature continuously.

DONE BY

ROLLNO :

911719104002

BRANCH :

Computer Science Engineering

COLLEGE :

MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY

'''

#import the necessary package!

import requests

import random

from time import *

from statistics import mean

'Storing Temperature and Humidity in array'

temp = [];

hum = [];

pause = True;

while(pause):

  sleep(0.25);

  randomtemp = random.randint(0,70);

```
randomhum = random.randint(0,100);
print("Temperature =",randomtemp,"Humidity = ",randomhum)
temp.append(randomtemp);
hum.append(randomhum);
if(len(temp) == 60 and len(hum) == 60 ):
   print("Average temperature is " + str( round(mean(temp))));
   print("Average Humidity is " + str( round( mean(hum))));
   'Room temperature analysis'
   if (mean(temp) > 50 ):
      print("\n\nKindly move to cooler place");
   elif (mean(temp) < 15):
      print("\n\nYour room temperature is too low");
   elif (mean(temp) > 15 and mean(temp) < 35 ):
      print("\n\nYour room temperature is Normal");
   elif (mean(temp) > 35 and mean(temp) < 50 ):
      print("\n\nYour room temperature is slightly hotter");
   'Room humidity analysis'
   if (mean(hum) < 30 ):
      print("\n\nYour room Humidity is Too Dry");
   elif (mean(hum) > 30 and mean(hum) < 60):
      print("Your room Humidity is Healthy");
   elif (mean(hum) > 60 and mean(hum) < 100 ):
      print("Your room Humidity is Not Healthy");

   temp = [];
   hum = [];

   sleep(5);
```

Output for Code :

Temperature = 37 Humidity = 84

Temperature = 62 Humidity = 41

Temperature = 37 Humidity = 97

Temperature = 7 Humidity = 46

Temperature = 52 Humidity = 84

Temperature = 2 Humidity = 58

Temperature = 61 Humidity = 75

Temperature = 29 Humidity = 25

Temperature = 15 Humidity = 82

Temperature = 40 Humidity = 94

Temperature = 63 Humidity = 28

Temperature = 18 Humidity = 76

Temperature = 65 Humidity = 49

Temperature = 61 Humidity = 7

Temperature = 57 Humidity = 70

Temperature = 28 Humidity = 1

Temperature = 20 Humidity = 56

Temperature = 28 Humidity = 59

Temperature = 70 Humidity = 79

Temperature = 68 Humidity = 67

Temperature = 44 Humidity = 67

Temperature = 10 Humidity = 17

Temperature = 14 Humidity = 92

Temperature = 44 Humidity = 67

Temperature = 11 Humidity = 23

Temperature = 39 Humidity = 37

Temperature = 22 Humidity = 44

Temperature = 21 Humidity = 70

Temperature = 46 Humidity = 50

Temperature = 62 Humidity = 72

Temperature = 41 Humidity = 97

Temperature = 52 Humidity = 89

Temperature = 53 Humidity = 6

Temperature = 37 Humidity = 82

Temperature = 24 Humidity = 55

Temperature = 49 Humidity = 54

Temperature = 10 Humidity = 83

Temperature = 10 Humidity = 46

Temperature = 25 Humidity = 36

Temperature = 56 Humidity = 100

Temperature = 39 Humidity = 78

Temperature = 59 Humidity = 79

Temperature = 43 Humidity = 69

Temperature = 24 Humidity = 64

Temperature = 21 Humidity = 86

Temperature = 25 Humidity = 36

Temperature = 15 Humidity = 31

Temperature = 59 Humidity = 45

Temperature = 19 Humidity = 13

Temperature = 17 Humidity = 22

Temperature = 37 Humidity = 39

Temperature = 8 Humidity = 37

Temperature = 40 Humidity = 66

Temperature = 23 Humidity = 40

Temperature = 14 Humidity = 3

Temperature = 39 Humidity = 51

Temperature = 35 Humidity = 77

Temperature = 53 Humidity = 63

Temperature = 70 Humidity = 80

Temperature = 43 Humidity = 38

Temperature = 38 Humidity = 31

Average temperature is 36

Average Humidity is 55

Your room temperature is slightly hotter

Your room Humidity is Healthy