

ASSIGNMENT-2

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MAXIMUM MARKS: 2 Marks

QUESTION : Build a python code by assuming temperature and humidity values using random function. And write a condition to continuously buzz an alarm in case of high temperature.

PROGRAM:

```
import random
import winsound
#Assuming the range of temperature 23 Celsius to 40 Celsius
#If temperature is above 33 Celsius consider high temperature

temperature=random.randint(23,40)
print("Temperature=",end=" ")
print(temperature)
if temperature>33:
    print("High temperature buzzer rings")
    print("XXXXXXBUZZERXXXXXX")
    winsound.Beep(4444, 500)
else:
    print("Normal Temperature")
    print("-----BUZZER-----")

#let dewpoint be less than temperature
difference=random.randint(3,8)
dewpoint=temperature-difference
print("dewpoint=",end=" ")
print(dewpoint)

#Relative Humidity
rh=100*(2.718281828*(17.625*dewpoint/(243.04+dewpoint)))/(2.718281828*(17.625*temperature/(243.04+temperature)))
print("Relative Humidity=",end=" ")
print(rh)
```

OUTPUT:

```
1 import random
2 #Assuming the range of temperature 23 Celsius to 40 Celsius
3 #If temperature is above 33 Celsius consider high temperature
4
5 temperature=random.randint(23,40)
6 print("Temperature=",end=" ")
7 print(temperature)
8 if temperature>33:
9     print("High temperature buzzer rings")
10    print("XXXXXBUZZERXXXXX")
11    ##winsound.Beep(4444, 500)
12 else:
13     print("Normal Temperature")
14     print("-----BUZZER-----")
15
16 #Let dewpoint be less than temperature
17 difference=random.randint(3,8)
18 dewpoint=temperature-difference
19 print("dewpoint=",end=" ")
20 print(dewpoint)
21
22 #Relative Humidity
23 rh=100*(2.718281828*(17.625*dewpoint/(243.04+dewpoint)))/(2.718281828*(17.625*temperature/(243.04+temperature)))
24 print("Relative Humidity=",end=" ")
25 print(rh)
26
```

Temperature= 30
Normal Temperature
-----BUZZER-----
dewpoint= 26
Relative Humidity= 67.95519873129149

..Program finished with exit code 0
press ENTER to exit console.