

Assignment 2 Date: 22-09-2022

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Maximum Mark :2Marks

Question:

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

Program:

```
proj2.py - C:/Users/ELCOT/AppData/Local/Programs/Python/Python310/proj2.py (3.10.7)
File Edit Format Run Options Window Help

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 lessthan 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:

```
IDLE Shell 3.10.7
File Edit Shell Debug Options Window Help
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/ELCOT/AppData/Local/Programs/Python/Python310/projj2.py ===
Temperature= 28
Normal Temperature
-----BUZZER-----
dewpoint= 25
Relative Humidity= 90.28503208476347
>>>
=== RESTART: C:/Users/ELCOT/AppData/Local/Programs/Python/Python310/projj2.py ===
Temperature= 30
Normal Temperature
-----BUZZER-----
dewpoint= 22
Relative Humidity= 75.54683569775631
>>>
=== RESTART: C:/Users/ELCOT/AppData/Local/Programs/Python/Python310/projj2.py ===
Temperature= 32
Normal Temperature
-----BUZZER-----
dewpoint= 25
Relative Humidity= 80.16527383972542
>>>
```