

## ASSIGNMENT 2

ASSIGNMENT DATE	22-SEP-2022
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STUDENT ROLL NUMBER	111519106302
MAXIMUM MARK	2MARK

### Question:

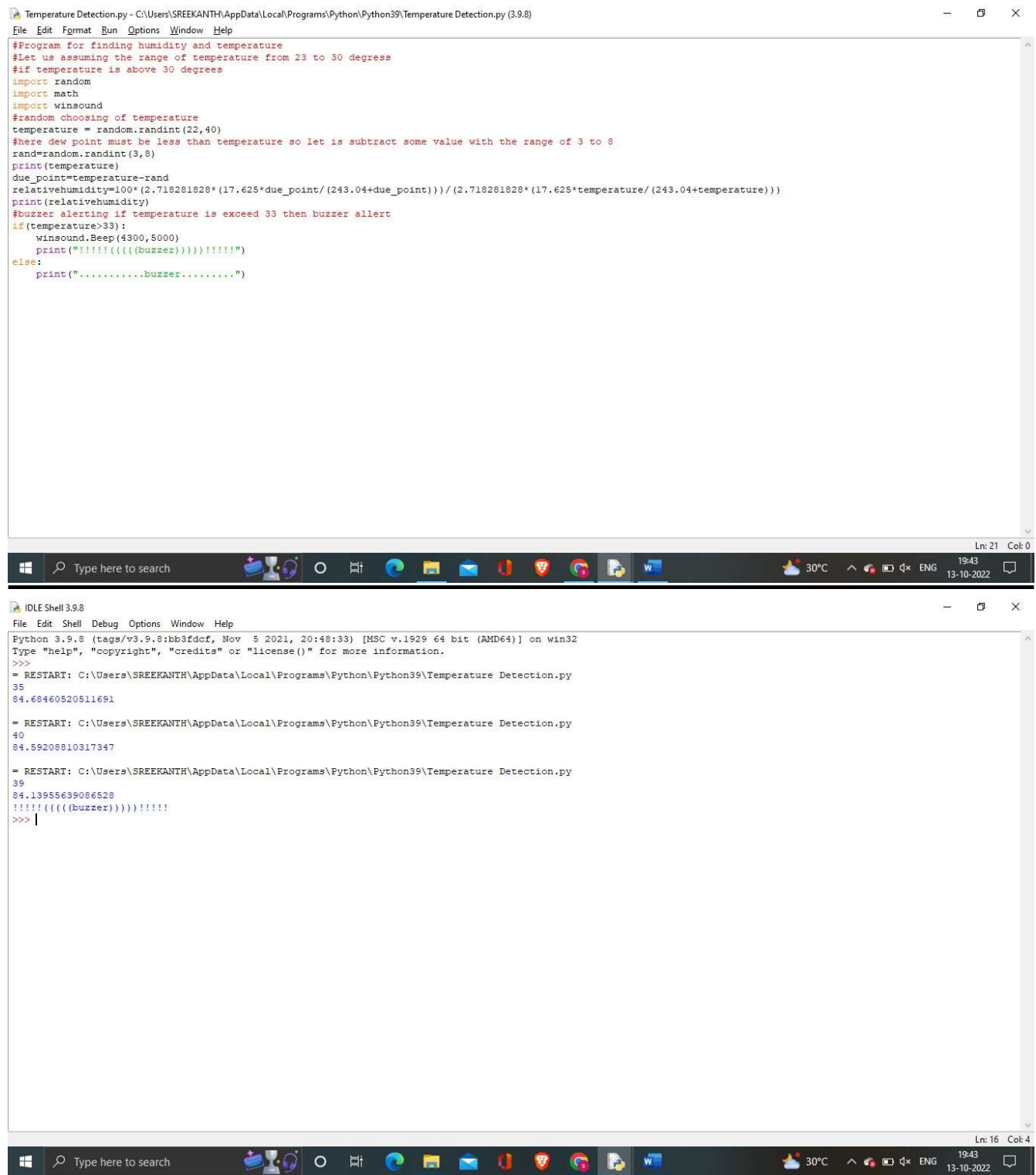
Build a Python code, Assume u get temperature and humidity values (generated with a random function to a variable) and write a condition detect alarm in case of high temperature.

### **Solution:**

#### **CODE:**

```
#Program for finding humidity and temperature
#Let us assuming the range of temperature from 23 to 30 degrees
#if temperature is above 30 degrees
import random import math
import winsound
#random choosing of temperature temperature
= random.randint(22,40)
#here dew point must be less than temperature so let is subtract some value with
the range of 3 to 8 rand=random.randint(3,8) print(temperature)
due_point=temperature-rand
relativehumidity=100*(2.718281828*(17.625*due_point/(243.04+due_point)))/(2.7
18281828*(17.625*temperature/(243.04+temperature))) print(relativehumidity)
#buzzer alerting if temperature is exceed 33 then buzzer allert
if(temperature>33):
    winsound.Beep(4300,5000)
    print("!!!!((((buzzer))))!!!!")
else:
    print(".....buzzer.....")
```

# OUTPUT:



```
Temperature Detection.py - C:\Users\SREEKANTH\AppData\Local\Programs\Python\Python39\Temperature Detection.py (3.9.8)
File Edit Format Run Options Window Help

#Program for finding humidity and temperature
#Let us assuming the range of temperature from 23 to 30 degrees
#if temperature is above 30 degrees
import random
import math
import winsound
#random choosing of temperature
temperature = random.randint(22,40)
#here dew point must be less than temperature so let is subtract some value with the range of 3 to 8
rand=random.randint(3,8)
print(temperature)
due_point=temperature-rand
relativehumidity=100*(2.718281828*(17.625*due_point/(243.04+due_point)))/(2.718281828*(17.625*temperature/(243.04+temperature)))
print(relativehumidity)
#buzzer alerting if temperature is exceed 33 then buzzer allert
if(temperature>33):
    winsound.Beep(4300,5000)
    print("!!!!((((buzzer))))!!!!")
else:
    print(".....buzzer.....")

Ln: 21 Col: 0

Type here to search 30°C 19:43 13-10-2022

IDLE Shell 3.9.8
File Edit Shell Debug Options Window Help

Python 3.9.8 (tags/v3.9.8:bb3fdecf, Nov 5 2021, 20:48:33) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\SREEKANTH\AppData\Local\Programs\Python\Python39\Temperature Detection.py
35
84.68460520511691

= RESTART: C:\Users\SREEKANTH\AppData\Local\Programs\Python\Python39\Temperature Detection.py
40
84.59208810317347

= RESTART: C:\Users\SREEKANTH\AppData\Local\Programs\Python\Python39\Temperature Detection.py
39
84.13955639086528
!!!!((((buzzer))))!!!!
>>>

Ln: 16 Col: 4

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```