ASSIGNMENT-2

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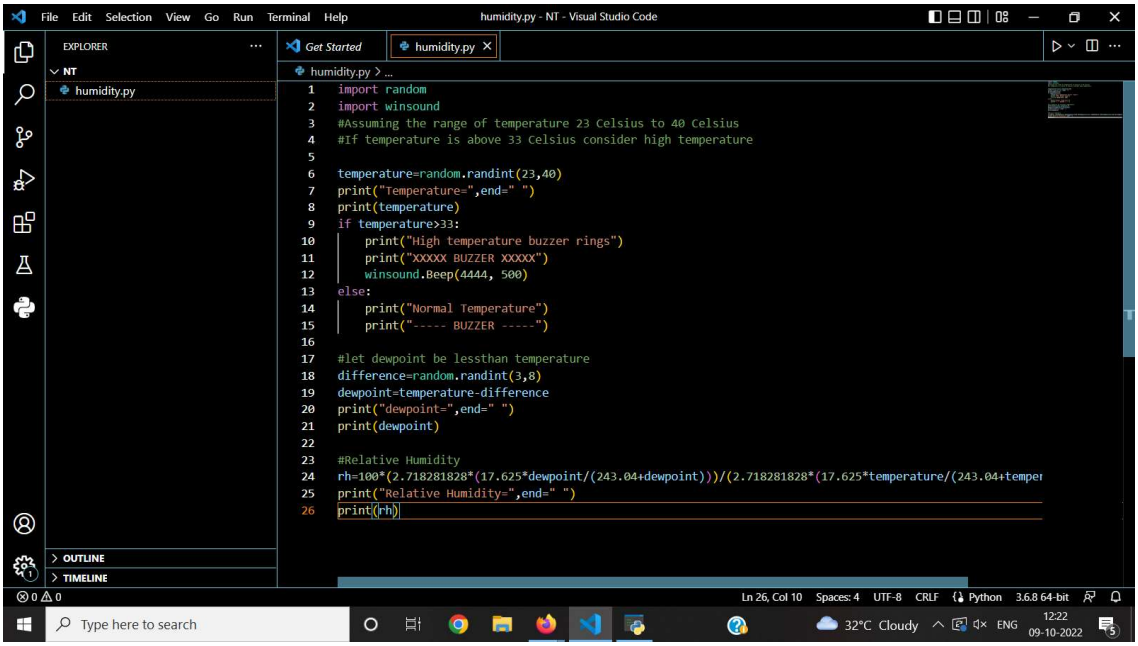
TEAM ID: PNT2022TMID15088

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.

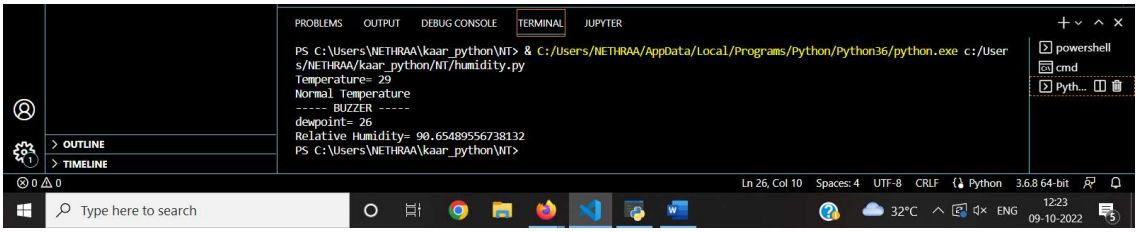
PROGRAM:



```
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("XXXXX BUZZER XXXXX")
    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+temper
print("Relative Humidity=",end=" ")
print(rh)
```

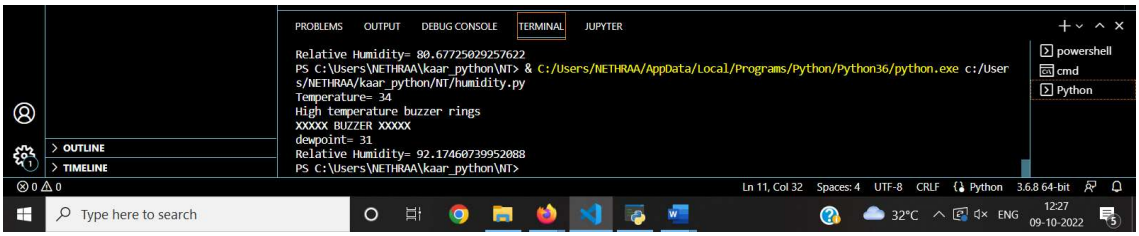
OUTPUT:

Case(i): Normal Temperature



```
PS C:\Users\NETHRAA\kaar_python\NT> & C:/Users/NETHRAA/AppData/Local/Programs/Python/Python36/python.exe c:/User
s/NETHRAA/kaar_python/NT/humidity.py
Temperature= 29
Normal Temperature
----- BUZZER -----
dewpoint= 26
Relative Humidity= 90.65489556738132
PS C:\Users\NETHRAA\kaar_python\NT>
```

Case(ii): High Temperature



```
Relative Humidity= 80.67725029257622
PS C:\Users\NETHRAA\kaar_python\NT> & C:/Users/NETHRAA/AppData/Local/Programs/Python/Python36/python.exe c:/User
s/NETHRAA/kaar_python/NT/humidity.py
Temperature= 34
High temperature buzzer rings
XXXXX BUZZER XXXXX
dewpoint= 31
Relative Humidity= 92.17460739952088
PS C:\Users\NETHRAA\kaar_python\NT>
```