

Assignment -2

Assignment Date	27 September 2022
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Maximum Marks	2 Marks

Question-1:

Write a python code to monitor the room temperature and buzzer when the temperature exceeds above 60 degree Celsius and alter relative humidity.



The screenshot shows the OnlineGDB IDE interface. The left sidebar contains navigation links: IDE, My Projects, Classroom (new), Learn Programming, Programming Questions, Sign Up, and Login. The main editor area displays a Python script named 'main.py'. The script generates a random temperature between 23 and 40, prints it, and checks if it is above 33. If above 33, it prints 'High Temperature Buzzer On' and 'BUZZER SOUND ON'. Otherwise, it prints 'Normal Temperature' and 'NO BUZZER'. It also calculates a random difference, a dew point, and a relative humidity value using a complex formula, printing each result.

```
main.py
#Assuming the range of temperature 23 Celsius to 40 Celsius
10 #If temperature is above 33 Celsius consider high temperature
11 import random
12 Temp=random.randint(23,40)
13 print("Temperature=",end=" ")
14 print(Temp)
15 if Temp>33:
16     print("High Temperature Buzzer On")
17     print("BUZZER SOUND ON")
18 else:
19     print("Normal Temperature")
20     print("NO BUZZER")
21
22 Diff=random.randint(3,8)
23 Dew_point=Temp-Diff
24 print("Dew Point=",end=" ")
25 print(Dew_point)
26
27 relv_hum=100*(2.7182*(17.625*Dew_point/(243.04+Dew_point)))/(2.7182*(17.625*Temp/(243.04+Temp)))
28 print("Relative Humidity =",end=" ")
29 print(relv_hum)
30
31
```



The screenshot shows the OnlineGDB IDE interface with the output of the Python script. The output is displayed in the console area, showing the temperature, whether the buzzer is on or off, the dew point, and the relative humidity. The program finished with exit code 0.

```
main.py
Input
Temperature= 26
Normal Temperature
NO BUZZER
Dew Point= 23
Relative Humidity = 89.45907498004928

...Program finished with exit code 0
Press ENTER to exit console.
```