

IOT ASSIGNMENT 2

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

Name: **HEMANTH R**

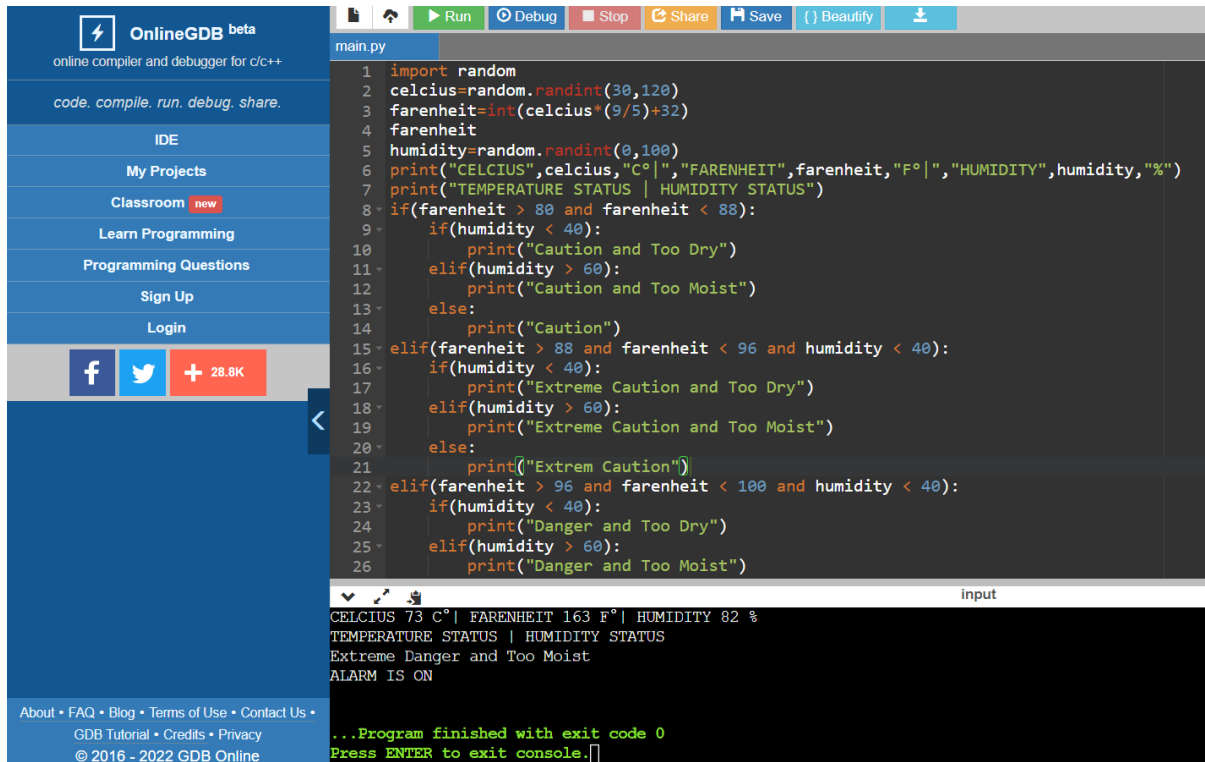
Roll no: 2116190801064

Code:

```
import random
celcius=random.randint(30,120)
fahrenheit=int(celcius*(9/5)+32)
fahrenheit
humidity=random.randint(0,100)
print("CELCIUS",celcius,"C°|","FARENHEIT",fahrenheit,"F°|","
HUMIDITY",humidity,"% ")
print("TEMPERATURE STATUS | HUMIDITY STATUS")
if(fahrenheit > 80 and fahrenheit < 88):
    if(humidity < 40):
        print("Caution and Too Dry")
    elif(humidity > 60):
        print("Caution and Too Moist")
    else:
        print("Caution")
elif(fahrenheit > 88 and fahrenheit < 96 and humidity < 40):
```

```
if(humidity < 40):
    print("Extreme Caution and Too Dry")
elif(humidity > 60):
    print("Extreme Caution and Too Moist")
else:
    print("Extrem Caution")
elif(farenheit > 96 and farenheit < 100 and humidity < 40):
    if(humidity < 40):
        print("Danger and Too Dry")
    elif(humidity > 60):
        print("Danger and Too Moist")
    else:
        print("Danger")
elif(farenheit > 100 or humidity < 40):
    if(humidity < 40):
        print("Extreme Danger and Too Dry")
    elif(humidity > 60):
        print("Extreme Danger and Too Moist")
    else:
        print("Extreme Danger")
    print("ALARM IS ON")
else:
    print("ALARM IS OFF")
```

OUTPUT :



The screenshot displays the OnlineGDB beta web interface. On the left is a sidebar with navigation links: IDE, My Projects, Classroom (marked 'new'), Learn Programming, Programming Questions, Sign Up, and Login. Below these are social media icons for Facebook, Twitter, and a '+ 28.8K' button. The main area is divided into a code editor and a console. The code editor shows a Python script named 'main.py' with the following content:

```
1 import random
2 celcius=random.randint(30,120)
3 fahrenheit=int(celcius*(9/5)+32)
4 fahrenheit
5 humidity=random.randint(0,100)
6 print("CELCIUS",celcius,"C°|","FARENHEIT",fahrenheit,"F°|","HUMIDITY",humidity,"%")
7 print("TEMPERATURE STATUS | HUMIDITY STATUS")
8 if(fahrenheit > 80 and fahrenheit < 88):
9     if(humidity < 40):
10         print("Caution and Too Dry")
11     elif(humidity > 60):
12         print("Caution and Too Moist")
13     else:
14         print("Caution")
15 elif(fahrenheit > 88 and fahrenheit < 96 and humidity < 40):
16     if(humidity < 40):
17         print("Extreme Caution and Too Dry")
18     elif(humidity > 60):
19         print("Extreme Caution and Too Moist")
20     else:
21         print("Extrem Caution")
22 elif(fahrenheit > 96 and fahrenheit < 100 and humidity < 40):
23     if(humidity < 40):
24         print("Danger and Too Dry")
25     elif(humidity > 60):
26         print("Danger and Too Moist")
```

The console output shows the execution results:

```
CELCIUS 73 C°| FARENHEIT 163 F°| HUMIDITY 82 %
TEMPERATURE STATUS | HUMIDITY STATUS
Extreme Danger and Too Moist
ALARM IS ON

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