

## 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.

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Code:

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

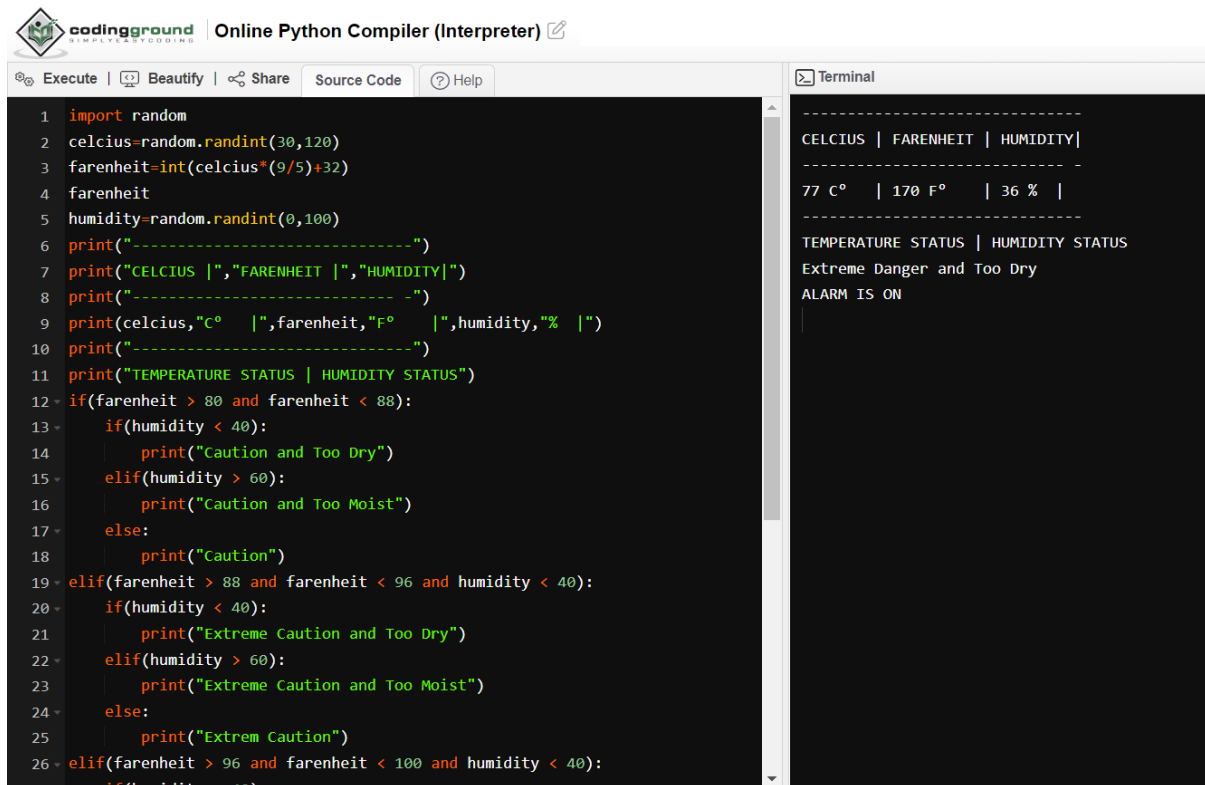
```
    print("Caution and Too Dry")
elif(humidity > 60):
    print("Caution and Too Moist")
else:
    print("Caution")
elif(farenheit > 88 and farenheit < 96 and humidity < 40):
    if(humidity < 40):
        print("Extreme Caution and Too Dry")
    elif(humidity > 60):
        print("Extreme Caution 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 shows the 'codingground' online Python compiler interface. The left pane contains the source code, and the right pane shows the terminal output.

```

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("-----")
7 print("CELCIUS |",fahrenheit |", "HUMIDITY|")
8 print("-----")
9 print(celcius,"C° |",fahrenheit,"F° |",humidity,"% |")
10 print("-----")
11 print("TEMPERATURE STATUS | HUMIDITY STATUS")
12 if(fahrenheit > 80 and fahrenheit < 88):
13     if(humidity < 40):
14         print("Caution and Too Dry")
15     elif(humidity > 60):
16         print("Caution and Too Moist")
17     else:
18         print("Caution")
19 elif(fahrenheit > 88 and fahrenheit < 96 and humidity < 40):
20     if(humidity < 40):
21         print("Extreme Caution and Too Dry")
22     elif(humidity > 60):
23         print("Extreme Caution and Too Moist")
24     else:
25         print("Extrem Caution")
26 elif(fahrenheit > 96 and fahrenheit < 100 and humidity < 40):
27     if(humidity < 40):

```

The terminal output on the right shows the following text:

```

-----
CELCIUS | FARENHEIT | HUMIDITY|
-----
77 C° | 170 F° | 36 % |
-----
TEMPERATURE STATUS | HUMIDITY STATUS
Extreme Danger and Too Dry
ALARM IS ON

```