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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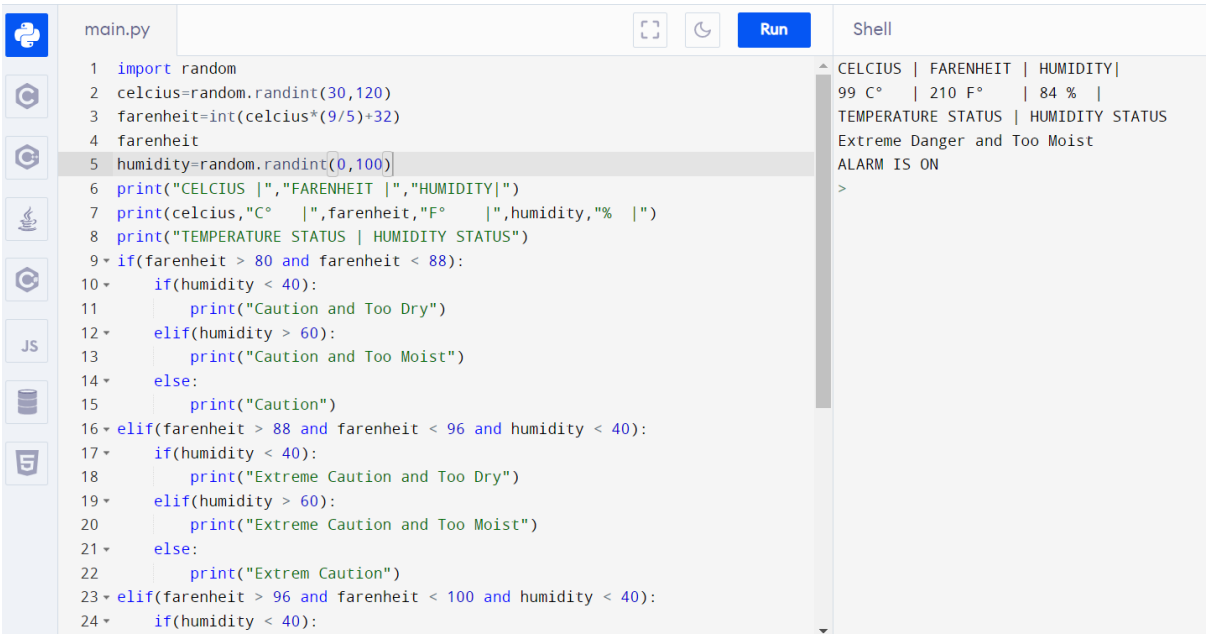
Code:

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


main.py
Run
Shell
import random
celcius=random.randint(30,120)
farenheit=int(celcius*(9/5)+32)
farenheit
humidity=random.randint(0,100)
print("CELCIUS |","FARENHEIT |","HUMIDITY|")
print(celcius,"C° |",farenheit,"F° |",humidity,"% |")
print("TEMPERATURE STATUS | HUMIDITY STATUS")
if(farenheit > 80 and farenheit < 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):
CELCIUS | FARENHEIT | HUMIDITY|
99 C° | 210 F° | 84 % |
TEMPERATURE STATUS | HUMIDITY STATUS
Extreme Danger and Too Moist
ALARM IS ON
>