

ASSIGNMENT – 2

Build a python code, Assume u get temperature and humidity values and write a condition to continuously detect alarm in case of high temperature.

```
import random

import time

while(1):

    temperature=random.randint(0,200) #TO GENERATE RANDOM NUMBER FOR TEMPERATURE

    print("Temperature="+str(temperature)+"°F")

    print("Temperature in celcius : "+str(((temperature-32)*5)//9)+"°C")

    if(temperature>50): #IF TEMPERATURE GOES HIGH THEN ALARM IS ON

        print("Temperature is too high")

        print("The Alarm is ON")

    else: #TEMPERATURE VALUE GOES NORMAL THEN ALARM IS OFF

        print("Temperature is normal")

        print("The Alarm is OFF")


    humidity=random.randint(0,100) #TO GENERATE RANDOM NUMBER FOR HUMIDITY

    print("Humidity="+str(humidity)+"%")


    if(humidity<50):

        print("Humidity is less than 50")

    else:

        print("Humidity is greater than 50")


    time.sleep(2)
```

output :

```
input
Temperature=40°F
Temperature in celcius : 4°C
Temperature is normal
The Alaram is OFF
Humidity=38%
Humidity is less tha 50
Temperature=96°F
Temperature in celcius : 35°C
Temperature is too high
The Alarm is ON
Temperature=195°F
Temperature in celcius : 90°C
Temperature is too high
The Alarm is ON
Temperature=137°F
Temperature in celcius : 58°C
Temperature is too high
The Alarm is ON
Temperature=27°F
Temperature in celcius : -3°C
Temperature is normal
The Alaram is OFF
Humidity=97%
Humidity is greater than 50
Temperature=56°F
Temperature in celcius : 13°C
Temperature is too high
The Alarm is ON
Temperature=117°F
Temperature in celcius : 47°C
Temperature is too high
The Alarm is ON
Temperature=10°F
Temperature in celcius : -13°C
```