GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES

Assignment 2

Problem Statement :

Build a python code, Assume you 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.

Code:

```python
#A python code assume you 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
def temp_sensor(name):
    k=True      print("PRESS ctrl+c SWITCH OFF THE ALARM ")
while k==True:              import random          import time
temperature=random.uniform(35,90)          print (f"The current
temperature is {temperature:.2f}°C")
humidity=random.randint(30,100)          print(f"Humidity is
{humidity}%")            if temperature>60:
            print(f"🚨🚨 BEEP!!!!BEEP!!!!BEEP!!!!🚨🚨\n The temperature
has exceeded to {temperature:.2f}°C \n press BREAK to stop the alarm")
while temperature>60:              k=str(input())              k=k.upper()
if k=="BREAK" :
              break
else:
            print('''Uh-oh I guess you've used wrong word kindly type
"BREAK" to stop the alarm ''')
continue              break
        if
temperature>60:
        print("The alarm has been switched off successfully")
else:
        print("The temperature is normal")
```

```
        time.sleep(7)
k=True
 name=str(input("ENTER YOUR USERNAME: ")) print("\tASSIGNMENT 2 -
DETECTING ALARM IN CASE OF HIGH TEMPERATURE") temp_sensor(name)
```

Output:

```
assignment-2.py > ...
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PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   JUPYTER                                          Python  +  ⌄  ⊟  🗑  ^

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\xampp\htdocs\sms-igniter> & "C:/Program Files/Python310/python.exe" c:/xampp/htdocs/sms-igniter/assignment-2.py
ENTER YOUR USERNAME: Mohammed Umar Shariff
        ASSIGNMENT 2 - DETECTING ALARM IN CASE OF HIGH TEMPERATURE
PRESS ctrl+c SWITCH OFF THE ALARM
The current temperature is 41.43°C
Humidity is 89%
The temperature is normal
The current temperature is 41.13°C
Humidity is 31%
The temperature is normal
The current temperature is 65.26°C
Humidity is 43%
 🚨🚨 BEEP!!!!BEEP!!!!BEEP!!!! 🚨🚨
 The temperature has exceeded to 65.26°C
 press BREAK to stop the alarm
break
The alarm has been switched off successfully
The current temperature is 62.10°C
Humidity is 31%
 🚨🚨 BEEP!!!!BEEP!!!!BEEP!!!! 🚨🚨
 The temperature has exceeded to 62.10°C
 press BREAK to stop the alarm
break
The alarm has been switched off successfully
The current temperature is 72.36°C
Humidity is 78%
 🚨🚨 BEEP!!!!BEEP!!!!BEEP!!!! 🚨🚨
 The temperature has exceeded to 72.36°C
 press BREAK to stop the alarm
break
The alarm has been switched off successfully
The current temperature is 60.51°C
Humidity is 53%
 🚨🚨 BEEP!!!!BEEP!!!!BEEP!!!! 🚨🚨
 The temperature has exceeded to 60.51°C
```