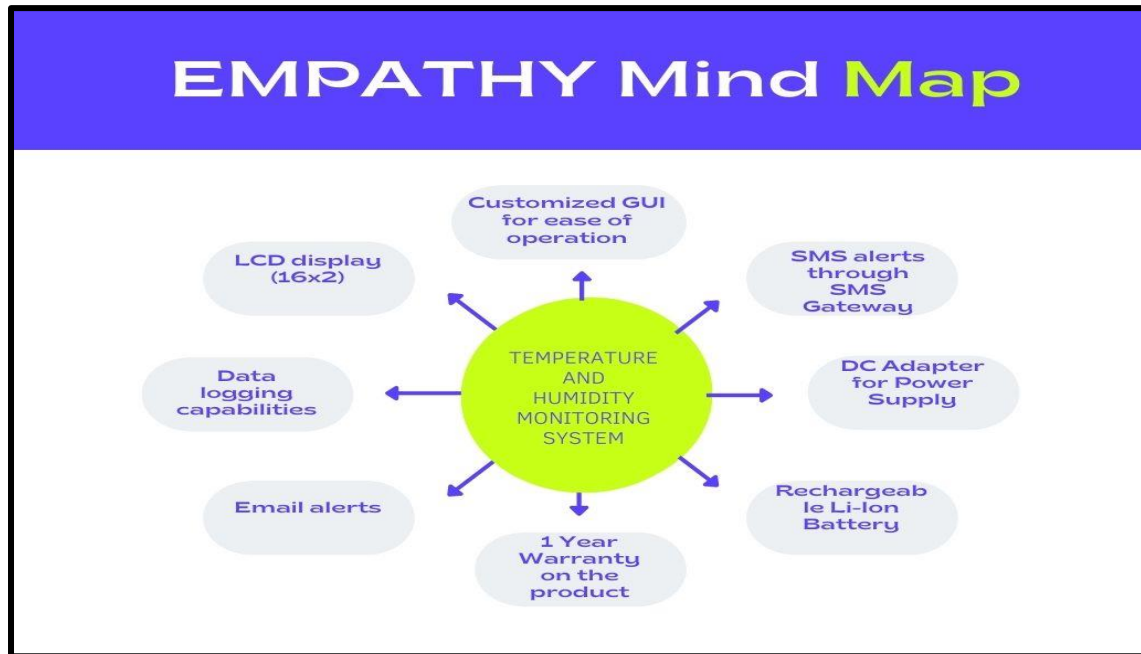


# ASSIGNMENT 2

To get Temperature and Humidity Values in Python Code



## AIM:

To get temperature and humidity values with random function to a variable and write a condition to detect alarm in high temperature .

## SOFTWARE USED :

Python Idle 3.10.4 (64-bit)

## PROGRAM :

```
import random

import time

while True:

    temp=random.randint(0,70)

    humd=random.randint(10,60)

    if temp > 50 and humd < 20:

        print("Temperature=",temp,end=" ")

        print("Humidity=",humd,"#####ALARM ON#####")
```

```

        time.sleep(3)

    else:

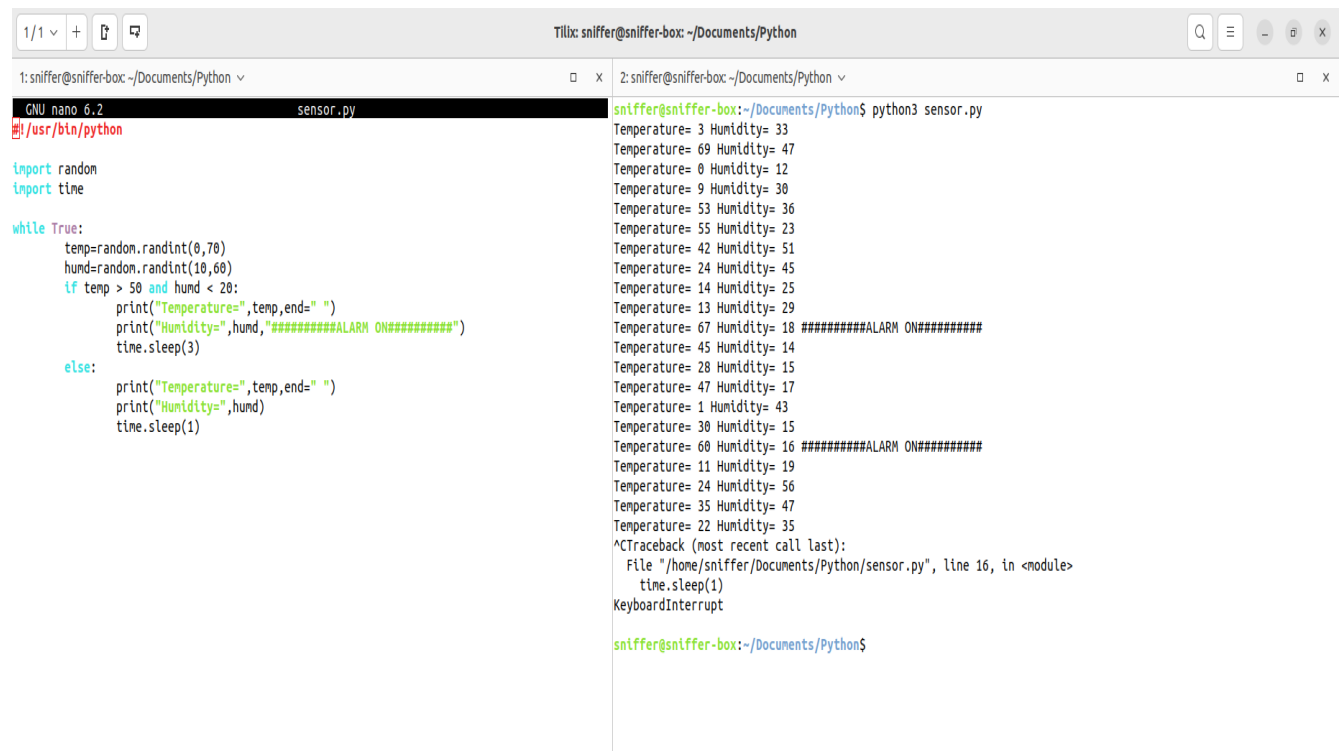
        print("Temperature=",temp,end=" ")

        print("Humidity=",humd)

        time.sleep(1)

```

### SIMULATION OUTPUT :



```

1: sniffer@sniffer-box: ~/Documents/Python
GNU nano 6.2 sensor.py
#!/usr/bin/python

import random
import time

while True:
    temp=random.randint(0,70)
    humd=random.randint(10,60)
    if temp > 50 and humd < 20:
        print("Temperature=",temp,end=" ")
        print("Humidity=",humd,"#####ALARM ON#####")
        time.sleep(3)
    else:
        print("Temperature=",temp,end=" ")
        print("Humidity=",humd)
        time.sleep(1)

2: sniffer@sniffer-box: ~/Documents/Python$ python3 sensor.py
Temperature= 3 Humidity= 33
Temperature= 69 Humidity= 47
Temperature= 0 Humidity= 12
Temperature= 9 Humidity= 30
Temperature= 53 Humidity= 36
Temperature= 55 Humidity= 23
Temperature= 42 Humidity= 51
Temperature= 24 Humidity= 45
Temperature= 14 Humidity= 25
Temperature= 13 Humidity= 29
Temperature= 67 Humidity= 18 #####ALARM ON#####
Temperature= 45 Humidity= 14
Temperature= 28 Humidity= 15
Temperature= 47 Humidity= 17
Temperature= 1 Humidity= 43
Temperature= 30 Humidity= 15
Temperature= 60 Humidity= 16 #####ALARM ON#####
Temperature= 11 Humidity= 19
Temperature= 24 Humidity= 56
Temperature= 35 Humidity= 47
Temperature= 22 Humidity= 35
^CTraceback (most recent call last):
  File "/home/sniffer/Documents/Python/sensor.py", line 16, in <module>
    time.sleep(1)
KeyboardInterrupt

sniffer@sniffer-box: ~/Documents/Python$

```

### CONDITIONS TO DETECT ALARM IN HIGH TEMPERATURE :

1. Continuously monitor the environment temperature and humidity.
2. If the temperate is greater than 70 degrees and humidity less than 20 then sound the alarm.
3. Else keep the alarm off.

### RESULT :

I have successfully coded for temperature and humidity values with random function to a variable and write a condition to detect alarm in high temperature .