

## Assignment -2

Assignment Date	16/11/2022
Student Name	K.Sri Ram
Student Roll Number	212219060137

### Question:

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.

### Solution:

#### Python Code:

```
import random
import time
while True:
    temp=random.randint(1,50)
    humidity=random.randint(1,80)
    print("Temperature: ",temp)
    print("Humidity: ",humidity)
    if((temp>15 and temp<50) and (humidity>30 and humidity<60)):
        print("Room's Temperature and Humidity is Normal")
    print("Alarm OFF")    else:
        print("Room's Temperature and Humidity is Abnormal")
    print("Alarm ON")    time.sleep(1)
```

### Output:

Sample.py - /home/palani/Desktop/Project Design & Planning/Sample....

File Edit Format Run Options Window Help

```
import random
import time
while True:
    temp=random.randint(1,50)
    humidity=random.randint(1,80)
    print("Temperature: ",temp)
    print("Humidity: ",humidity)
    if((temp>15 and temp<50) and (humidity>30 and humidity<60)):
        print("Room's Temperature and Humudity is Normal")
        print("Alarm OFF")
    else:
        print("Room's Temperature and Humudity is Abnormal")
        print("Alarm ON")
    time.sleep(1)
```

Ln: 14 Col: 17

IDLE Shell 3.10.6

File Edit Shell Debug Options Window Help

Python 3.10.6 (main, Aug 10 2022, 11:40:04) [GCC 11.3.0] on linux  
Type "help", "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: /home/palani/Desktop/Project Design & Planning/Sample.py =====  
Temperature: 13  
Humidity: 25  
Room's Temperature and Humudity is Abnormal  
Alarm ON  
Temperature: 24  
Humidity: 54  
Room's Temperature and Humudity is Normal  
Alarm OFF  
Temperature: 31  
Humidity: 3  
Room's Temperature and Humudity is Abnormal  
Alarm ON  
Temperature: 34  
Humidity: 39  
Room's Temperature and Humudity is Normal  
Alarm OFF  
Temperature: 25  
Humidity: 28  
Room's Temperature and Humudity is Abnormal  
Alarm ON  
Temperature: 43  
Humidity: 53  
Room's Temperature and Humudity is Normal  
Alarm OFF  
Temperature: 32  
Humidity: 20  
Room's Temperature and Humudity is Abnormal  
Alarm ON  
Temperature: 26  
Humidity: 71  
Room's Temperature and Humudity is Abnormal  
Alarm ON  
Temperature: 20  
Humidity: 55

Ln: 307 Col: 0