

Assignment – II

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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)
    humudity=random.randint(1,80)
    print("Temperature: ",temp)
    print("Humudity: ",humudity)
    if((temp>15 and temp<50) and (humudity>30 and humudity<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)
```

Output:

```
Temperature: 38
Humudity: 67
Room's Temperature and Humudity is Abnormal
Alarm ON
Temperature: 3
Humudity: 3
Room's Temperature and Humudity is Abnormal
Alarm ON
Temperature: 42
Humudity: 48
Room's Temperature and Humudity is Normal
Alarm OFF
Temperature: 28
Humudity: 51
Room's Temperature and Humudity is Normal
Alarm OFF
```

```
Temperature: 41
Humudity: 53
Room's Temperature and Humudity is Normal
Alarm OFF
Temperature: 12
Humudity: 25
Room's Temperature and Humudity is Abnormal
Alarm ON
Temperature: 23
Humudity: 2
Room's Temperature and Humudity is Abnormal
Alarm ON
Temperature: 19
Humudity: 40
Room's Temperature and Humudity is Normal
Alarm OFF
```