

Assignment -2

Assignment Date	16/11/2022
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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)
    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....

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```
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)
```

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IDLE Shell 3.10.6

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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

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