

Assignment - 2

Assignment Date	25 September 2022
Student Name	ISWARYA S P
Student Roll Number	111719104094
Maximum Marks	2 Marks

Question :

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 incase of high temperature.

Solution:

Program Code:

```
import random # random function
temp = random.randint(1, 100)
humty = random.randint(1, 100)

print(temp) # temperature value
print(humty) # humidity value
```

```
if((temp<30)&(humty<50)):
    print("temperatureisnormal:")
    print("humidityisnormal:")
    print("alarmoff")
elif((temp<30)&(humty>50)):
    print("temperatureislow")
    print("humidityishigh")
    print("alarmoff")
elif((temp>30)&(humty<50)):
    print("temperatureishigh:")
    print("humidityisnormal")
    print("alarmon")
elif((temp>30)&(humty<60)):
    print("temperatureishigh")
    print("humidityisnormal:")
    print("alarmon")
elif((temp>30)&(humty>60)):
    print("temperatureishigh")
    print("humidityishigh")
```

print("alarmon")

main.py		Run	Shell
1	import random#randomfunction		46
2	temp=random.randint(1,100)		55
3	humty=random.randint(1,100)		temperature is high
4	print(temp)#temperaturevalue		humidity is normal:
5	print(humty)#hmidityvalue		alarm on
6	if((temp<30)&(humty<50)):		>
7	print("temperature is normal:")		
8	print("humidity is normal:")		
9	print("alarm off")		
10	elif((temp<30)&(humty>50)):		
11	print("temperature is low")		
12	print("humidity is high")		
13	print("alarm off")		
14	elif((temp>30)&(humty<50)):		
15	print("temperature is high:")		
16	print("humidity is normal")		
17	print("alarm on")		
18	elif((temp>30)&(humty<60)):		
19	print("temperature is high")		
20	print("humidity is normal:")		
21	print("alarm on")		
22	elif((temp>30)&(humty>60)):		
23	print("temperature is high")		
24	print("humidity is high")		
25	print("alarm on")		