

<b>Name</b>	<b>Swethaa K</b>
<b>Reg.No</b>	<b>210619106059</b>
<b>Departament</b>	<b>ECE</b>
<b>Title</b>	<b>Gas Leakage Monitoring and Alerting System</b>
<b>Topic</b>	<b>Assignment on temperature and humidity sensing and alarm automation using python</b>
<b>Mentor</b>	<b>W.NANCY</b>

# Assignment on temperature and humidity sensing and alarm automation using python

## Code:

```
import random

i=1

while(True):

a=random.randint(10,100)

b=random.randint(10,100)

if(a>35 and b<65):

    print("HIGH TEMPERATURE AND HUMIDITY OF:",a,b,"%","ALARM IS ON")

elif(a<35 and b>65):

    print("NORMAL TEMPERATURE AND HUMIDITY OF:",a,b,"%","ALARM IS OFF")

if(i<10):

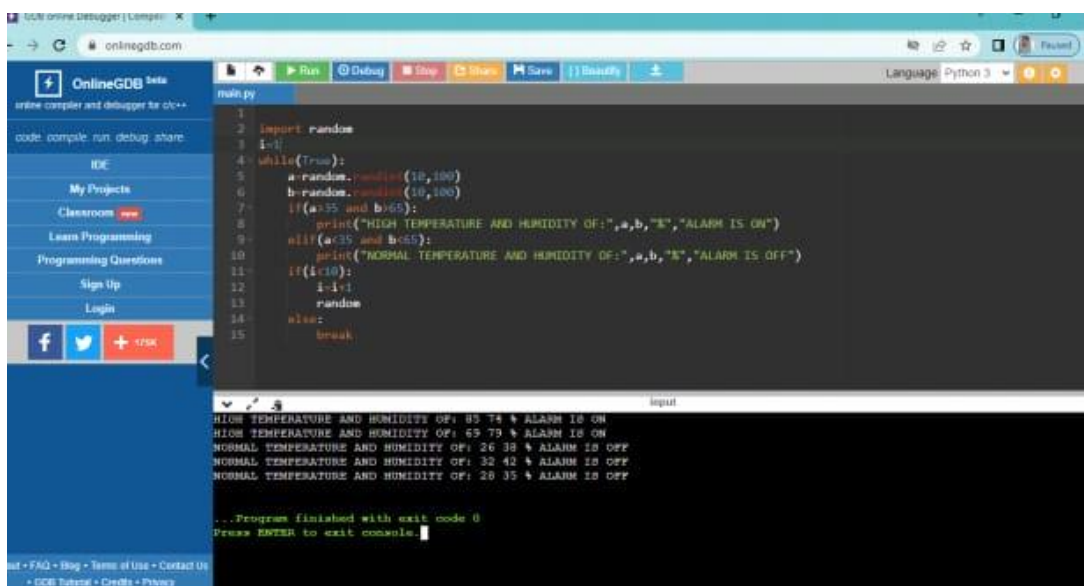
    i=i+1

    random

else:

    break
```

## Output:

A screenshot of the OnlineGDB web interface. The code editor shows a Python script with 15 lines. The output console at the bottom displays the results of the program's execution. The program generates random temperature and humidity values and prints messages indicating whether an alarm is on or off based on specific thresholds. The output shows five iterations of the program, with the first two triggering an alarm and the next three not. The program ends with a message indicating it finished with exit code 0.

```
1 import random
2 i=1
3
4 while(True):
5     a=random.randint(10,100)
6     b=random.randint(10,100)
7     if(a>35 and b<65):
8         print("HIGH TEMPERATURE AND HUMIDITY OF:",a,b,"%","ALARM IS ON")
9     elif(a<35 and b>65):
10        print("NORMAL TEMPERATURE AND HUMIDITY OF:",a,b,"%","ALARM IS OFF")
11
12 if(i<10):
13     i=i+1
14     random
15 else:
16     break
```

Output:

```
HIGH TEMPERATURE AND HUMIDITY OF: 85 74 % ALARM IS ON
HIGH TEMPERATURE AND HUMIDITY OF: 65 79 % ALARM IS ON
NORMAL TEMPERATURE AND HUMIDITY OF: 26 38 % ALARM IS OFF
NORMAL TEMPERATURE AND HUMIDITY OF: 32 42 % ALARM IS OFF
NORMAL TEMPERATURE AND HUMIDITY OF: 28 35 % ALARM IS OFF

...Program finished with exit code 0
Press ENTER to exit console.
```