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Topic	Assignment on temperature and humidity sensing and alarm automation using python
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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):

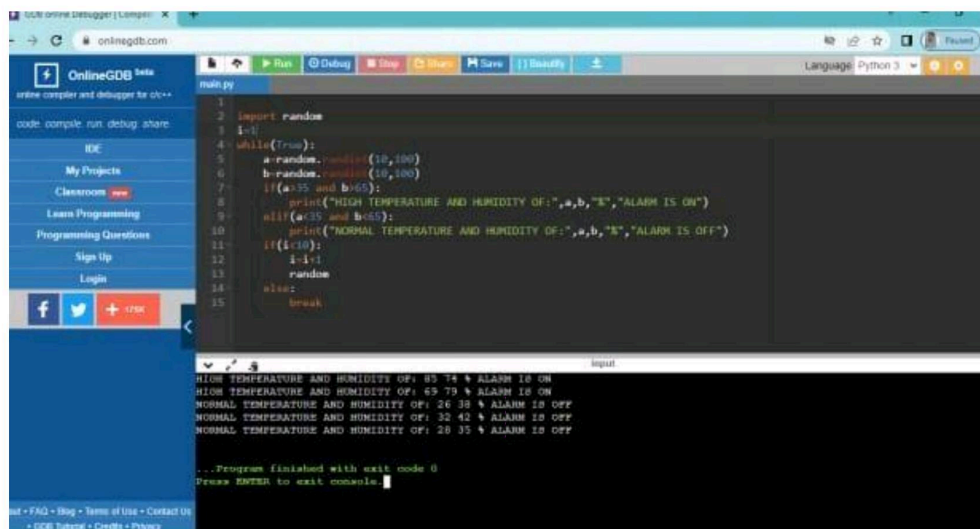
    i=i+1

    random

else:

    break
```

Output:

A screenshot of the OnlineGDB web interface. The code editor shows a Python script that generates random temperature (a) and humidity (b) values. It uses conditional statements to print "ALARM IS ON" if temperature is high and humidity is low, or "ALARM IS OFF" if temperature is low and humidity is high. The script runs for 10 iterations. The output console shows the results of these iterations, with some iterations triggering the alarm and others not. The program ends with an exit code of 0.

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

Output:

```
HIGH TEMPERATURE AND HUMIDITY OF: 85 75 % ALARM IS ON
HIGH TEMPERATURE AND HUMIDITY OF: 65 75 % 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
```