

IOT ASSIGNMENT 2

TOPIC: *Assignment on temperature and humidity sensing and alarm automation using python*

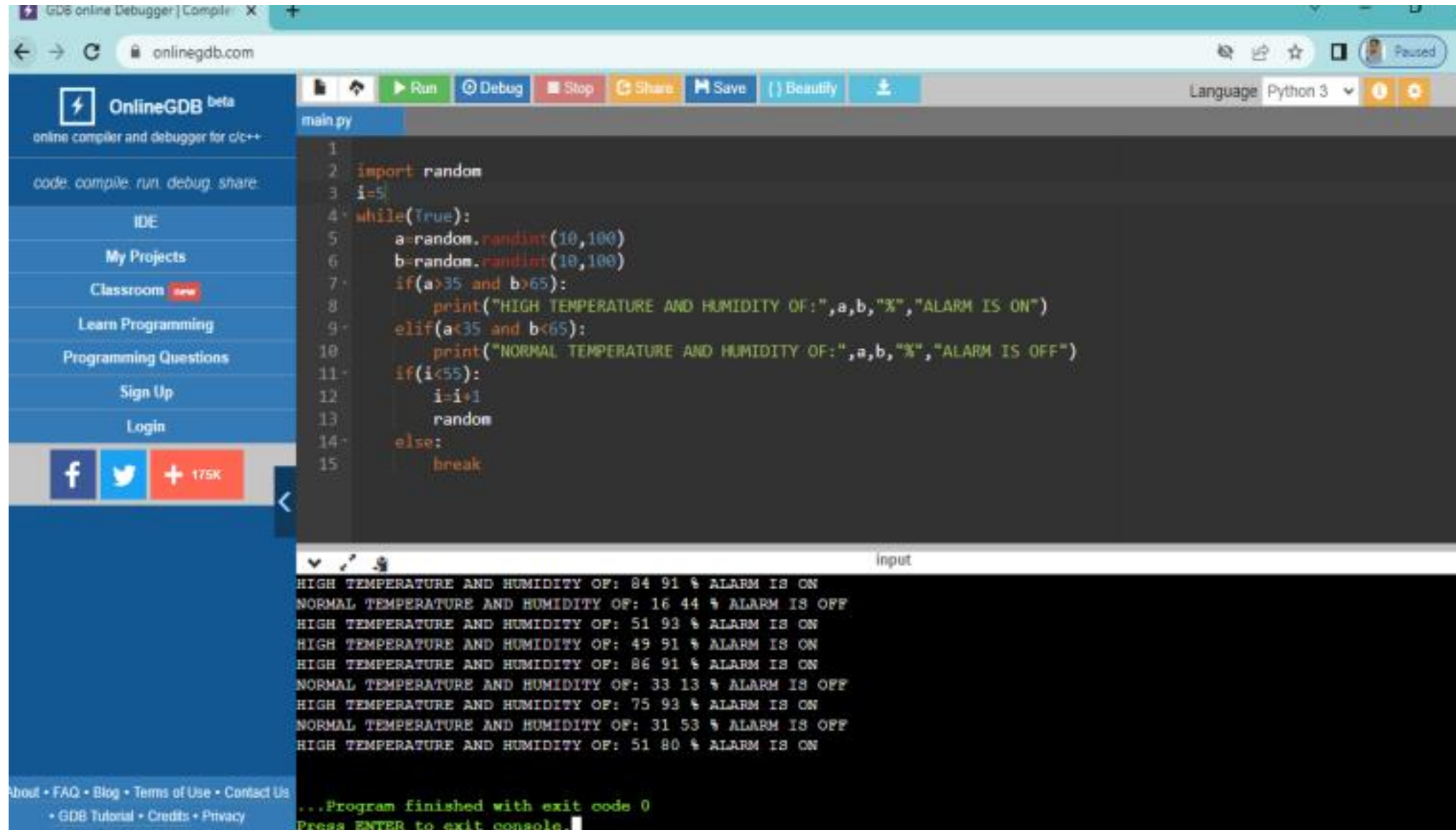
Name: KIRTHIGA S

CODE:

```
import random  
i=5  
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<55):  
    i=i+1  
random  
else:
```

break

OUTPUT:-



The screenshot shows the OnlineGDB interface. The code editor contains a Python script that generates random temperature and humidity values and checks if an alarm should be on or off. A `break` statement is used to exit the loop after 5 iterations. The output console shows the results of these iterations.

```
1 import random
2 i=5
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<55):
11        i=i+1
12    random
13 else:
14    break
```

Output:

```
HIGH TEMPERATURE AND HUMIDITY OF: 84 91 % ALARM IS ON
NORMAL TEMPERATURE AND HUMIDITY OF: 16 44 % ALARM IS OFF
HIGH TEMPERATURE AND HUMIDITY OF: 51 93 % ALARM IS ON
HIGH TEMPERATURE AND HUMIDITY OF: 49 91 % ALARM IS ON
HIGH TEMPERATURE AND HUMIDITY OF: 86 91 % ALARM IS ON
NORMAL TEMPERATURE AND HUMIDITY OF: 33 13 % ALARM IS OFF
HIGH TEMPERATURE AND HUMIDITY OF: 75 93 % ALARM IS ON
NORMAL TEMPERATURE AND HUMIDITY OF: 31 53 % ALARM IS OFF
HIGH TEMPERATURE AND HUMIDITY OF: 51 80 % ALARM IS ON
...Program finished with exit code 0
Press ENTER to exit console.
```