

IBM-NALAYATHIRAN

DOMAIN-IOT

ASSIGNMENT 2

TEMPERATURE AND HUMIDITY SENSING AND ALARM AUTOMATION USING  
PYTHON

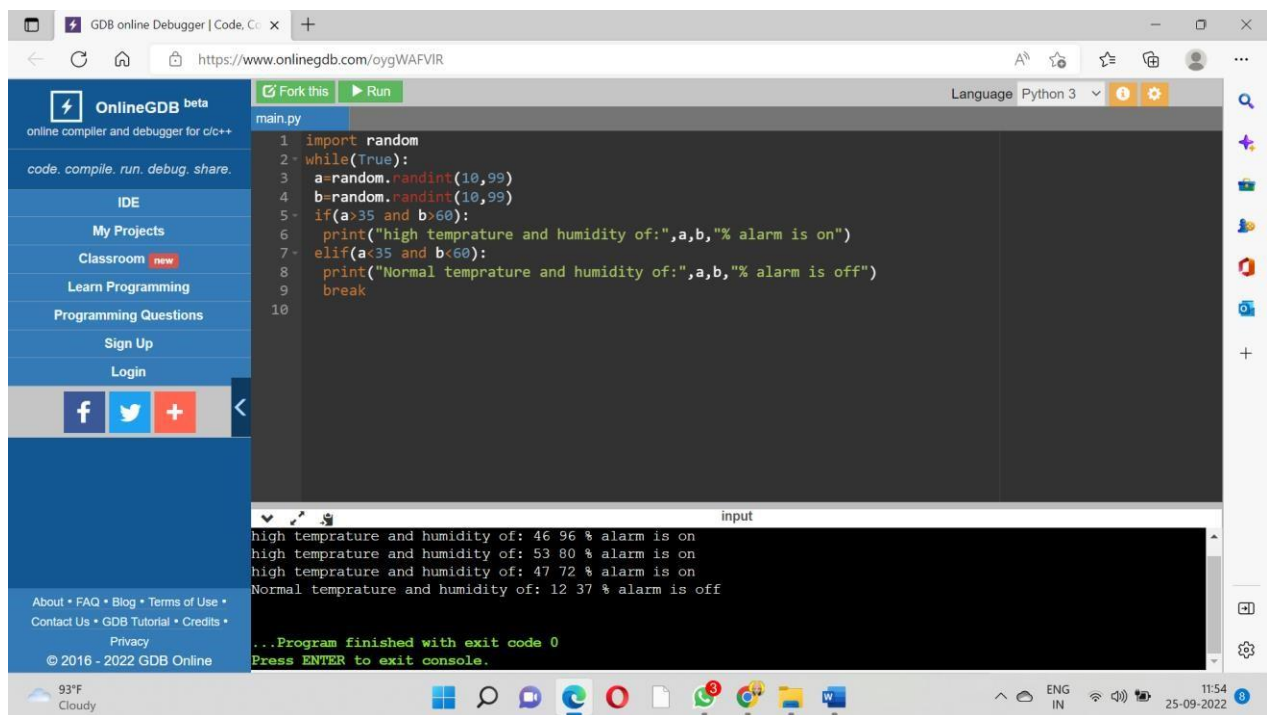
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CODE:

```
import random while(True):  
  
a=random.randint(10,99)  
  
b=random.randint(10,99) if(a>35  
and b>60):  
  
print("high temperature and humidity of:",a,b,"% alarm is on") elif(a<35  
and b<60):  
  
print("Normal Temperature and humidity of:",a,b,"%alarm is off") break
```

OUTPUT:



The screenshot displays the OnlineGDB web interface. On the left is a sidebar with navigation links: OnlineGDB beta, code, compile, run, debug, share, IDE, My Projects, Classroom (new), Learn Programming, Programming Questions, Sign Up, and Login. The main area shows a code editor with a Python script named 'main.py'. The script uses the 'random' module to generate random values for temperature (a) and humidity (b) within the range 10 to 99. It uses an if-elif structure to print messages about the alarm status based on these values. The output window at the bottom shows the execution results: three lines indicating 'high temperature and humidity' with the alarm on, and one line indicating 'Normal temperature and humidity' with the alarm off. The program ends with '...Program finished with exit code 0' and a prompt to 'Press ENTER to exit console.' The browser's address bar shows the URL 'https://www.onlinegdb.com/oYGWAFVIR'. The Windows taskbar at the bottom indicates the system time as 11:54 on 25-09-2022.

```
1 import random  
2 while(True):  
3     a=random.randint(10,99)  
4     b=random.randint(10,99)  
5     if(a>35 and b>60):  
6         print("high temperature and humidity of:",a,b,"% alarm is on")  
7     elif(a<35 and b<60):  
8         print("Normal temperature and humidity of:",a,b,"% alarm is off")  
9         break  
10
```

high temprature and humidity of: 46 96 % alarm is on  
high temprature and humidity of: 53 80 % alarm is on  
high temprature and humidity of: 47 72 % alarm is on  
Normal temprature and humidity of: 12 37 % alarm is off  
...Program finished with exit code 0  
Press ENTER to exit console.