

IOT ASSIGNMENT 2

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

Name: Madhushree K

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 displays the OnlineGDB web interface. The top navigation bar includes links for GDB online Debugger, Compile, and a plus sign for additional options. The main header area features social media links (Gmail, YouTube, Maps, personal mail, clg mail, churro, momo, skillrack, queenistas) and a sidebar with navigation links (IDE, My Projects, Classroom, Learn Programming, Programming Questions, Sign Up, Login). The central workspace is divided into three main sections: a code editor, an input field, and an output console.

The code editor shows a C++ program named `main.py` that uses the `random` library to generate random numbers and prints temperature and humidity data. The program includes a `while` loop that continues until the user enters a value less than 55. The output console displays the results of the program's execution, showing multiple iterations of the random data generation and the final exit message.

```
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
```

input

```
HIGH TEMPERATURE AND HUMIDITY OF: 45 42 % ALARM IS ON
HIGH TEMPERATURE AND HUMIDITY OF: 72 34 % ALARM IS ON
HIGH TEMPERATURE AND HUMIDITY OF: 100 54 % ALARM IS ON
HIGH TEMPERATURE AND HUMIDITY OF: 95 11 % ALARM IS ON
HIGH TEMPERATURE AND HUMIDITY OF: 81 44 % ALARM IS ON
HIGH TEMPERATURE AND HUMIDITY OF: 87 57 % ALARM IS ON
HIGH TEMPERATURE AND HUMIDITY OF: 79 43 % ALARM IS ON

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