

Assignment -2

Assignment Date	28 September 2022
Student Name	Monish R
Student Roll Number	611219106047
Maximum Marks	2 Marks

Question:

Build a python code, assume you get temperature and humidity values (generated with random function to a variable) and write a condition to continuously detect alarm in case of high temperature.

Code:

```
import random

while(True):

    x=random.randint(10,99)

    y=random.randint(10,99)

    if(x>40 and y>70):

        print("High temprature and humidity of:",x,y,"%","alarm is ON")

    elif(x<30 and y<55):

        print("Normal temprature and humidity of:",x,y,"%","alarm is OFF")

    break
```

Output:

The screenshot shows a Python IDE interface. On the left, there's a sidebar with icons for Python, C, C++, Java, JavaScript, and a database. The main area is split into two panes. The left pane, titled 'main.py', contains the Python code from the previous block. The right pane, titled 'Shell', shows the output of the code. The output consists of ten lines of text, each representing a random iteration of the while loop. Each line follows the format: 'High temprature and humidity of: [x] [y] % alarm is ON' or 'Normal temprature and humidity of: [x] [y] % alarm is OFF'. The values of x and y are integers between 10 and 99. The output shows a mix of 'ON' and 'OFF' states, indicating that the code is running continuously and checking the conditions repeatedly. The last line of output is 'Normal temprature and humidity of: 16 12 % alarm is OFF' followed by a prompt character '>'.

```
main.py  Run  Shell

1 import random
2 while(True):
3     x=random.randint(10,99)
4     y=random.randint(10,99)
5     if(x>40 and y>70):
6         print("High temprature and humidity of:",x,y,"%","alarm is ON")
7     elif(x<30 and y<55):
8         print("Normal temprature and humidity of:",x,y,"%","alarm
          is OFF")
9         break
10

High temprature and humidity of: 73 92 % alarm is ON
High temprature and humidity of: 95 90 % alarm is ON
High temprature and humidity of: 92 78 % alarm is ON
High temprature and humidity of: 92 85 % alarm is ON
High temprature and humidity of: 61 75 % alarm is ON
High temprature and humidity of: 61 77 % alarm is ON
High temprature and humidity of: 78 77 % alarm is ON
High temprature and humidity of: 97 88 % alarm is ON
High temprature and humidity of: 53 99 % alarm is ON
High temprature and humidity of: 86 74 % alarm is ON
Normal temprature and humidity of: 16 12 % alarm is OFF
> |
```