

**Assignment -2**  
Python Programming

Assignment Date	21 September 2022
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Maximum Marks	2 Marks

**Question-1:**

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
temp = round(random.uniform(20,50))
hum = round(random.uniform(10,100))

if (temp>20 and temp<=35) and (hum>10):
    print("Temperature : {}".format(temp))
    print("Humidity : {}".format(hum))
    print("Low Temperature")
    print("Alarm Off")
elif(temp>35 and temp<=40) and (hum>10):
    print("Temperature : {}".format(temp))
    print("Humidity : {}".format(hum))
    print("High Temperature")
    print("Alarm On")
elif(temp>40 and temp<=50) and (hum>10):
    print("Temperature : {}".format(temp))
    print("Humidity : {}".format(hum))
    print("very High in Temperature")
    print("Alarm On")
```

PROGRAM:

OUTPUT:



The image shows a Python IDE interface. At the top, there is a toolbar with icons for file operations, running, debugging, stopping, sharing, saving, and beautifying code. The language is set to Python 3. The main editor window displays a Python script named 'main.py'. The script generates random temperature and humidity values and uses conditional logic to print status messages and alarm states. Below the editor, an 'input' window shows the output of the program.

```
1 import random
2 temp = round(random.uniform(20,50))
3 hum = round(random.uniform(10,100))
4
5 if (temp>20 and temp<=35) and (hum>10):
6     print("Temperature : {}".format(temp))
7     print("Humidity : {}".format(hum))
8     print("Low Temperature")
9     print("Alarm Off")
10 elif(temp>35 and temp<=40) and (hum>10):
11     print("Temperature : {}".format(temp))
12     print("Humidity : {}".format(hum))
13     print("High Temperature")
14     print("Alarm On")
15 elif(temp>40 and temp<=50) and (hum>10):
16     print("Temperature : {}".format(temp))
17     print("Humidity : {}".format(hum))
18     print("very High in Temperature")
19     print("Alarm On")
```

input

Temperature : 24°C  
Humidity : 23  
Low Temperature  
Alarm Off