

## ASSIGNMENT-2

### PYTHON PROGRAMMING

Assignment Date	15 October 2022
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Student Roll Number	312319106123
Maximum Marks	2 Marks

#### QUESTION:

Build a python code, assume u 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.

#### SOLUTION:

```
import random

import time

while True:

    temp = random.randrange(25, 50)

    humid = random.randrange(10, 100)

    print("Temperature:", temp, "degree Celsius")

    print("Humidity:", humid, "%")

    if humid > 70:

        print("Very Humid Weather")

    elif humid < 55:

        print("Dry and Comfortable weather")

    else:

        print("Sticky Weather")

    if temp > 33:

        print("High Temperature")

        print("WARNING!! ALARM ON\n")

    else:

        print("Low Temperature\n")

    time.sleep(2)
```

## PROGRAM AND OUTPUT:

The screenshot displays the PyCharm IDE interface. The left pane shows the source code of `main.py`, which is a Python script that generates random temperature and humidity values and prints weather-related messages based on these values. The right pane shows the output of the program, which consists of several lines of printed data and status messages. The bottom status bar indicates the current version of PyCharm and the Python interpreter being used.

```
1 import random
2 import time
3 while True:
4     temp = random.randrange(25, 50)
5     humid = random.randrange(10, 100)
6     print("Temperature:", temp, "degree Celsius")
7     print("Humidity:", humid, "%")
8
9     if humid > 70:
10        print("Very Humid Weather")
11    elif humid < 55:
12        print("Dry and Comfortable weather")
13    else:
14        print("Sticky Weather")
15
16    if temp > 33:
17        print("High Temperature")
18        print("WARNING!! ALARM ON\n")
19    else:
20        print("Low Temperature\n")
21
22    time.sleep(2)
```

Run: "C:\Users\gtpre\Web Developement\pythonProject\venv\Scripts\python.exe" "C:/Users/gtpre/Web  
Temperature: 49 degree Celsius  
Humidity: 22 %  
Dry and Comfortable weather  
High Temperature  
WARNING!! ALARM ON  
  
Temperature: 42 degree Celsius  
Humidity: 30 %  
Dry and Comfortable weather  
High Temperature  
WARNING!! ALARM ON  
  
Temperature: 46 degree Celsius  
Humidity: 31 %  
Dry and Comfortable weather  
High Temperature  
WARNING!! ALARM ON  
  
Temperature: 31 degree Celsius  
Humidity: 54 %  
Dry and Comfortable weather  
Low Temperature  
  
Temperature: 44 degree Celsius  
Humidity: 38 %  
Dry and Comfortable weather  
High Temperature  
WARNING!! ALARM ON  
  
Temperature: 37 degree Celsius

PyCharm 2021.1.3 available  
Update...

PyCharm 2021.1.3 available // Update... (26 minutes ago) 22:1 Python 3.9 (pythonProject)