

Assignment II

Python Programming

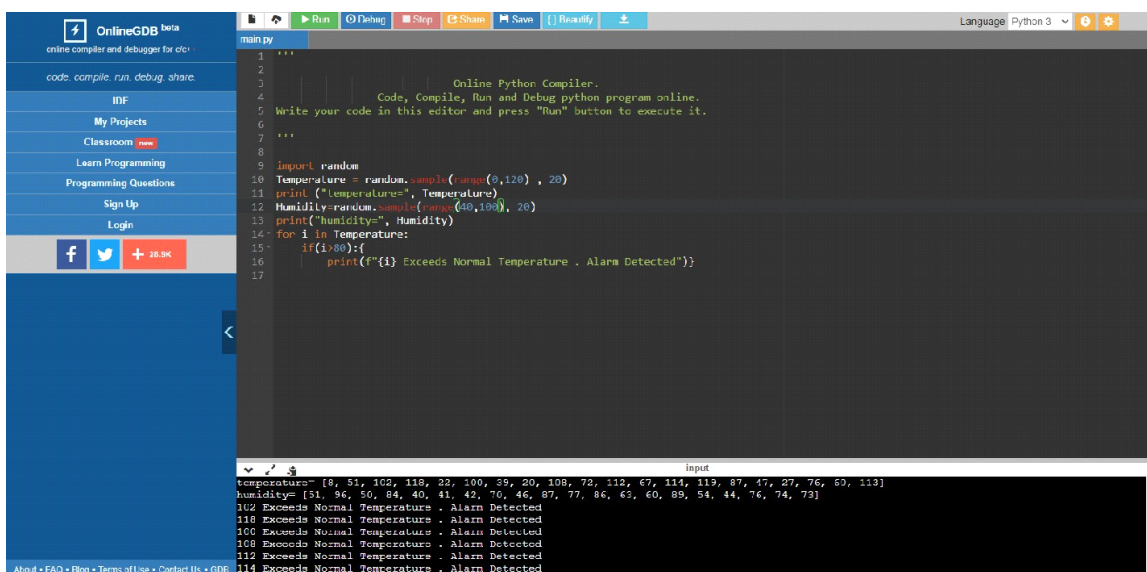
Assignment Date	27 September,2022
Student Name	Shanmugapriya V
Student Roll Number	922519205101
Maximum Marks	4 Marks

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 .

SOLUTION:

```
import random
Temperature = random.sample(range(0,120) , 20)
print ("temperature=", Temperature)
Humidity=random.sample(range(40,100), 20)
print("humidity=", Humidity)
for i in Temperature:
    if(i>80):{
        print(f"{i} Exceeds Normal Temperature . Alarm Detected")}
```



The screenshot shows the OnlineGDB Python IDE interface. The code editor contains the following Python code:

```
1  """
2
3      Online Python Compiler.
4      Code, Compile, Run and Debug python program online.
5      Write your code in this editor and press "Run" button to execute it.
6
7  """
8
9  import random
10 Temperature = random.sample(range(0,120) , 20)
11 print ("temperature=", Temperature)
12 Humidity=random.sample(range(40,100), 20)
13 print("humidity=", Humidity)
14 for i in Temperature:
15     if(i>80):{
16         print(f"{i} Exceeds Normal Temperature . Alarm Detected")
17     }
```

The output window shows the following results:

```
temperature= [8, 51, 102, 118, 22, 100, 39, 20, 108, 72, 112, 67, 114, 119, 87, 47, 27, 76, 63, 113]
humidity= [51, 96, 50, 84, 40, 41, 42, 70, 46, 87, 77, 86, 63, 60, 89, 54, 44, 76, 74, 73]
102 Exceeds Normal Temperature . Alarm Detected
118 Exceeds Normal Temperature . Alarm Detected
100 Exceeds Normal Temperature . Alarm Detected
108 Exceeds Normal Temperature . Alarm Detected
112 Exceeds Normal Temperature . Alarm Detected
114 Exceeds Normal Temperature . Alarm Detected
```