

**Assignment -2**  
Python Programming

Assignment Date	27 September 2022
Student Name	LOGESHWER V
Student Roll Number	110319106023
Maximum Marks	2 Marks

**Question-1:**

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.

CODE:

```
import random from
time import sleep

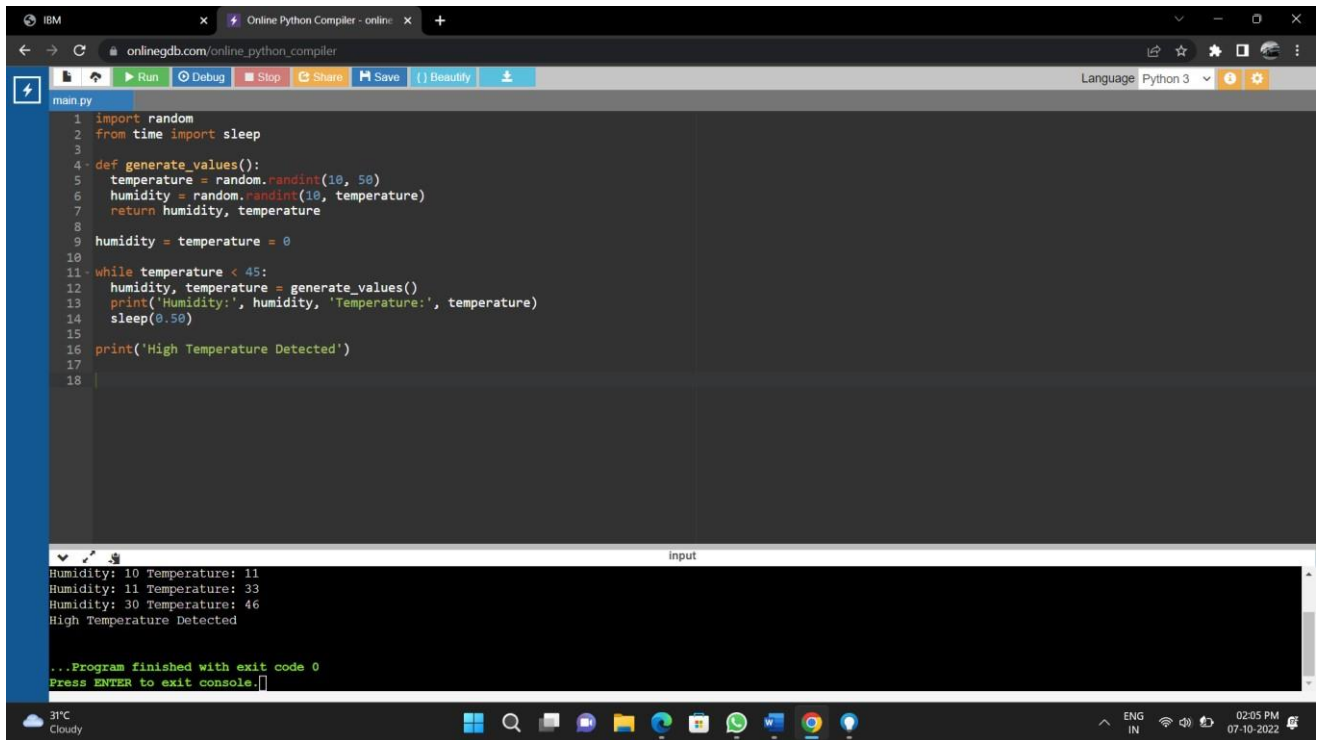
def generate_values():
    temperature = random.randint(10, 50)
    humidity = random.randint(10, temperature)
    return humidity, temperature

humidity = temperature = 0

while temperature < 45:
    humidity, temperature = generate_values()
    print('Humidity:', humidity, 'Temperature:', temperature)
    sleep(0.50)

print('High Temperature Detected')
```

OUTPUT:



The screenshot shows a web browser window with the URL `onlinegdb.com/online_python_compiler`. The browser's address bar and tabs are visible at the top. Below the browser window is a toolbar with buttons for Run, Debug, Stop, Share, Save, and Beautify. The main area is a code editor with a dark background, displaying a Python script in a file named `main.py`. The script defines a `generate_values` function that returns random humidity and temperature values. It then enters a `while` loop that prints these values and sleeps for 0.5 seconds until the temperature reaches 45, at which point it prints 'High Temperature Detected'. Below the code editor is a console window showing the output of the program: three lines of humidity and temperature data, followed by the detection message. The console also shows the program's exit code and a prompt to press ENTER to exit. At the bottom of the image is a Windows taskbar with various application icons, system status indicators (31°C, Cloudy, ENG IN, Wi-Fi, Bluetooth), and the date/time (02:55 PM, 07-10-2022).

```
1 import random
2 from time import sleep
3
4 def generate_values():
5     temperature = random.randint(10, 50)
6     humidity = random.randint(10, temperature)
7     return humidity, temperature
8
9 humidity = temperature = 0
10
11 while temperature < 45:
12     humidity, temperature = generate_values()
13     print('Humidity:', humidity, 'Temperature:', temperature)
14     sleep(0.50)
15
16 print('High Temperature Detected')
17
18
```

Humidity: 10 Temperature: 11  
Humidity: 11 Temperature: 33  
Humidity: 30 Temperature: 46  
High Temperature Detected

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