

**Assignment -2**  
Python Programming

Assignment Date	27 September 2022
Student Name	SRINIVASAN.D
Student Roll Number	110319106044
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

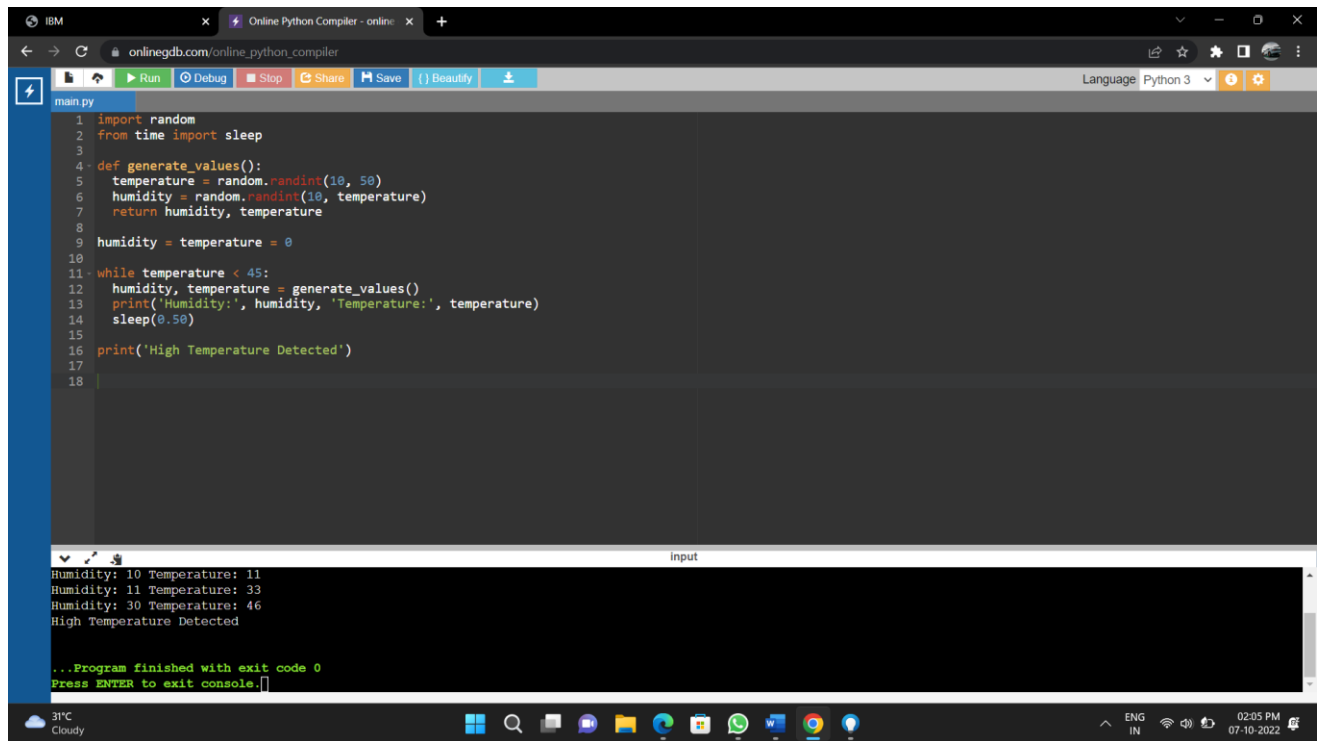
def generate_values():
    temperature = random.randint(10, 50)
    humidity = random.randint(10, temperature)
    return humidity, temperature

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 code editor with a dark background and light-colored text. The code is a Python script named `main.py` that uses the `random` module to generate random values for temperature and humidity. It includes a `while` loop that continues as long as the temperature is below 45. The script prints the current humidity and temperature values and includes a `sleep(0.50)` call. After the loop, it prints a message indicating that high temperature has been detected. The output window at the bottom of the code editor shows the results of the program's execution, displaying the humidity and temperature values at each iteration and the final detection message. The output window also shows the program's exit code and a prompt to press ENTER to exit the console. The bottom of the image shows a Windows taskbar with various icons and system information, including the date and time.

```
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')
```

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.