

**Assignment -2**  
Python Programming

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|---------------------|-------------------|
| Assignment Date     | 27 September 2022 |
| Student Name        | NARESH KUMAR M    |
| Student Roll Number | 110319106302      |
| 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

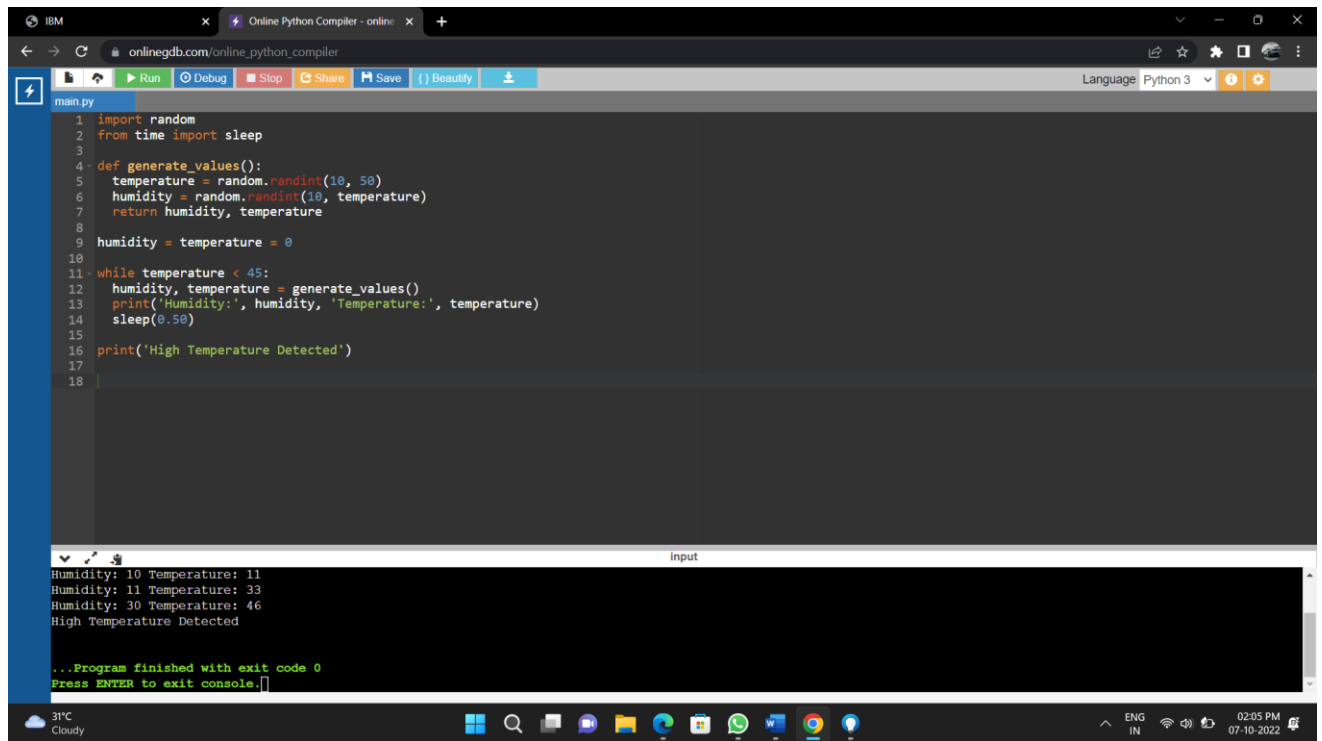
def generate_values():
    temperature = random.randint(10, 50)
    humidity = random.randint(10, temperature)
    return humidity, temperature

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. 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 prints these values and a `print` statement for 'High Temperature Detected'. The code is as follows:

```
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')
```

Below the code editor is a console window with a black background. It displays the output of the program, which shows three iterations of humidity and temperature values, followed by the 'High Temperature Detected' message. The console output is:

```
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.
```

The bottom of the image shows a Windows taskbar with various icons, including the Start button, search, and several application icons. The system tray on the right shows the date and time as 02:05 PM on 07-10-2022.