

Team ID: NM2023TMID10876

Team Leader : Ragul M

Problem statement: Build Python code, Generate Temperature and Humidity values (Use Random function to generate values) and write a condition to detect an alarm in case of high temperature and high Humidity.

Python Code:

```
import random

temperature = random.uniform(0, 45)

humidity = random.uniform(0, 100)

temperature_threshold = 28

humidity_threshold = 55

if temperature > temperature_threshold and humidity > humidity_threshold:

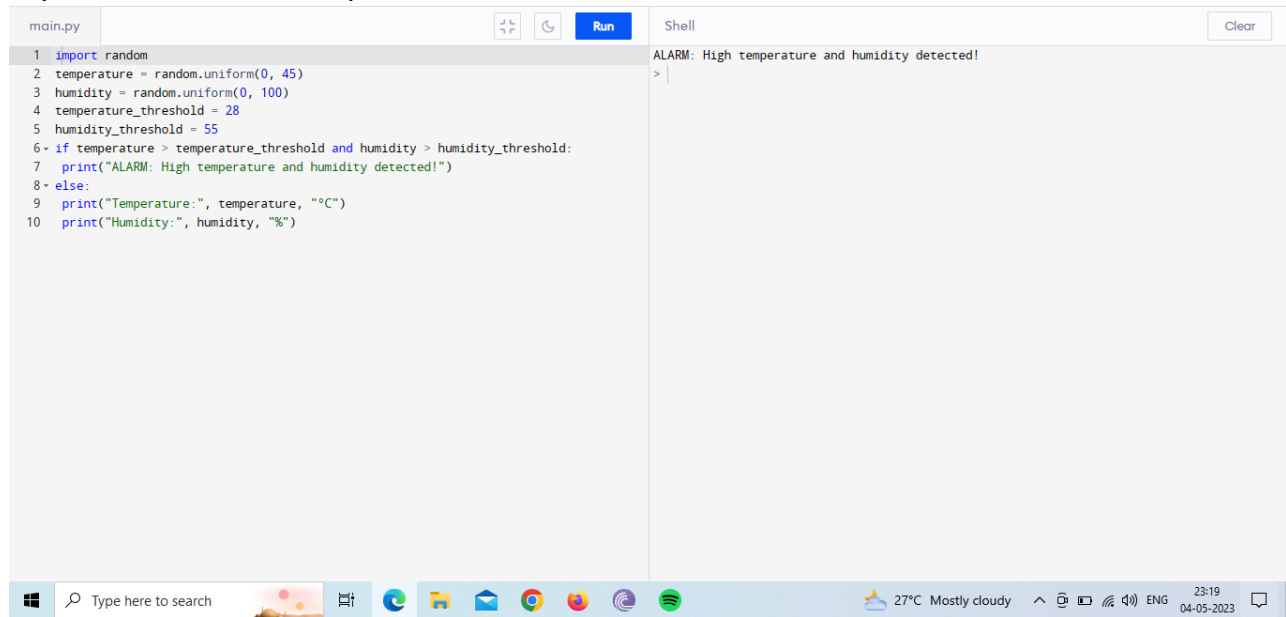
    print("ALARM: High temperature and humidity detected!")

else:

    print("Temperature:", temperature, "°C")

    print("Humidity:", humidity, "%")
```

Python Code with output:



The image shows a screenshot of a Python IDE interface. On the left, a file named 'main.py' contains the following Python code:

```
1 import random
2 temperature = random.uniform(0, 45)
3 humidity = random.uniform(0, 100)
4 temperature_threshold = 28
5 humidity_threshold = 55
6 if temperature > temperature_threshold and humidity > humidity_threshold:
7     print("ALARM: High temperature and humidity detected!")
8 else:
9     print("Temperature:", temperature, "°C")
10    print("Humidity:", humidity, "%")
```

On the right, the 'Shell' window displays the output of the code execution:

```
ALARM: High temperature and humidity detected!
>
```

The bottom of the image shows a Windows taskbar with the search bar, task view button, and several application icons (Edge, File Explorer, Mail, Chrome, Firefox, VS Code, Spotify). The system tray on the right indicates a temperature of 27°C, mostly cloudy weather, and the time 23:19 on 04-05-2023.