

ASSIGNMENT – 2

Date:	27 September 2022
Team ID	PNT2022TMID08711
Project	Real-Time River Water Quality Monitoring and Control System

Code:

```
import random
```

```
temperature = round(random.random() * 50,2)
```

```
humidity = round(random.random() * 100,2)
```

```
if temperature >= 35:
```

```
    print("The temperature is: " + str(temperature))
```

```
    print("The humidity in air is " + str(humidity) + "%")
```

```
    print("It is hot ALARM!")
```

```
elif temperature >20 and temperature < 35:
```

```
    if temperature >= 30 and humidity >50:
```

```
        print("The temperature is: " + str(temperature))
```

```
        print("The humidity in air is " + str(humidity) + "%")
```

```
        print("It feels hot because of humidity ALARM!")
```

```
elif temperature >= 25 and humidity >80:
```

```
    print("The temperature is: " + str(temperature))
```

```
    print("The humidity in air is " + str(humidity) + "%")
```

```
    print("It feels hot because of humidity ALARM!")
```

```
else:
```

```
    print("The temperature is: " + str(temperature))
```

```
print("The humidity in air is " + str(humidity) + "%")
```

```
print("The weather is great today!")
```

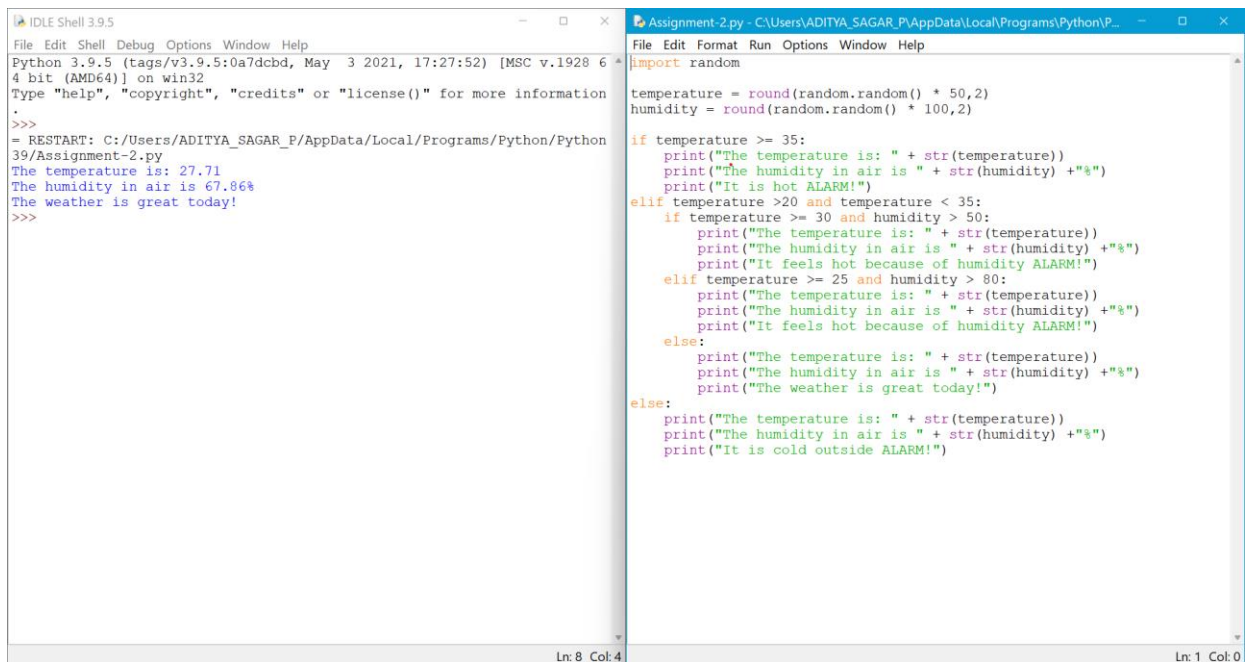
else:

```
print("The temperature is: " + str(temperature))
```

```
print("The humidity in air is " + str(humidity) + "%")
```

```
print("It is cold outside ALARM!")
```

Output:



The image shows two side-by-side windows from the Python IDLE 3.9.5 environment. The left window, titled 'IDLE Shell 3.9.5', displays the output of a Python script execution. The right window, titled 'Assignment-2.py - C:\Users\ADITYA_SAGAR_P\AppData\Local\Programs\Python\Python39\Assignment-2.py', shows the source code of the script.

Left Window (IDLE Shell 3.9.5) Output:

```
= RESTART: C:/Users/ADITYA_SAGAR_P/AppData/Local/Programs/Python/Python39/Assignment-2.py
The temperature is: 27.71
The humidity in air is 67.86%
The weather is great today!
>>>
```

Right Window (Assignment-2.py) Code:

```
import random

temperature = round(random.random() * 50, 2)
humidity = round(random.random() * 100, 2)

if temperature >= 35:
    print("The temperature is: " + str(temperature))
    print("The humidity in air is " + str(humidity) + "%")
    print("It is hot ALARM!")
elif temperature > 20 and temperature < 35:
    if temperature >= 30 and humidity > 50:
        print("The temperature is: " + str(temperature))
        print("The humidity in air is " + str(humidity) + "%")
        print("It feels hot because of humidity ALARM!")
    elif temperature >= 25 and humidity > 80:
        print("The temperature is: " + str(temperature))
        print("The humidity in air is " + str(humidity) + "%")
        print("It feels hot because of humidity ALARM!")
    else:
        print("The temperature is: " + str(temperature))
        print("The humidity in air is " + str(humidity) + "%")
        print("The weather is great today!")
else:
    print("The temperature is: " + str(temperature))
    print("The humidity in air is " + str(humidity) + "%")
    print("It is cold outside ALARM!")
```