NAAN MUDHALVAN – PROFESSIONAL READINESS FOR INNOVATION, EMPLOYMENT AND ENTERPRENEURSHIP

ASSIGNMENT – 2

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QUESTION:

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.

○ Example: Temp is greater than 30 c, play alarm sound. Same for humidity.

○ Submit the Assignment in PDF format in the Git repo.

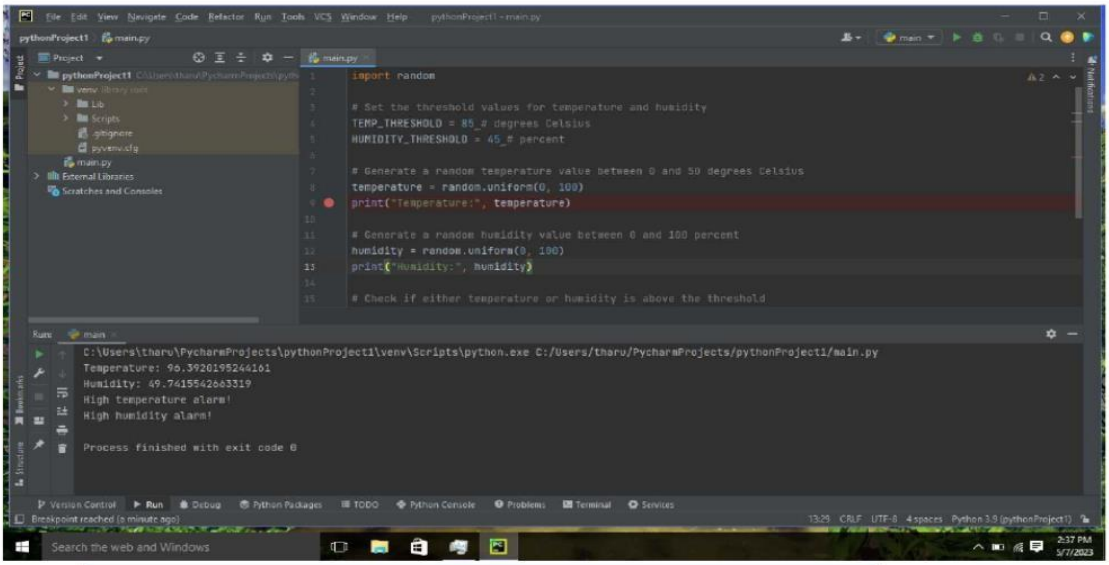
○ Everyone in the team should submit the assignment as it is an individual task.

Code:

main.py

```
import random

# Set the threshold values for temperature and humidity
TEMP_THRESHOLD = 85 # degrees Celsius HUMIDITY
THRESHOLD = 45 # percent

# Generate a random temperature value between 0 and 100 degrees
Celsius temperature = random uniform(0, 100) print("Temperature:",
temperature
# Generate a random humidity value between 0 and 100 percent
humidity random.uniform(0, 100)

print("Humidity:", humidity)

# Check if either temperature or humidity is above the threshold
 if temperature>TEMP_THRESHOLD:
print("High temperature alarm!") if
humidity> HUMIDITY THRESHOLD:

print("High humidity alarm!")
```

OUTPUT:


import random
# Set the threshold values for temperature and humidity
TEMP_THRESHOLD = 85 # degrees Celsius
HUMIDITY_THRESHOLD = 45 # percent
# Generate a random temperature value between 0 and 50 degrees Celsius
temperature = random.uniform(0, 100)
print("Temperature:", temperature)
# Generate a random humidity value between 0 and 100 percent
humidity = random.uniform(0, 100)
print("Humidity:", humidity)
# Check if either temperature or humidity is above the threshold
C:\Users\tharu\PycharmProjects\pythonProject1\venv\Scripts\python.exe C:/Users/tharu/PycharmProjects/pythonProject1/main.py
Temperature: 96.3920195244161
Humidity: 49.7415542663319
High temperature alarm!
High humidity alarm!
Process finished with exit code 0