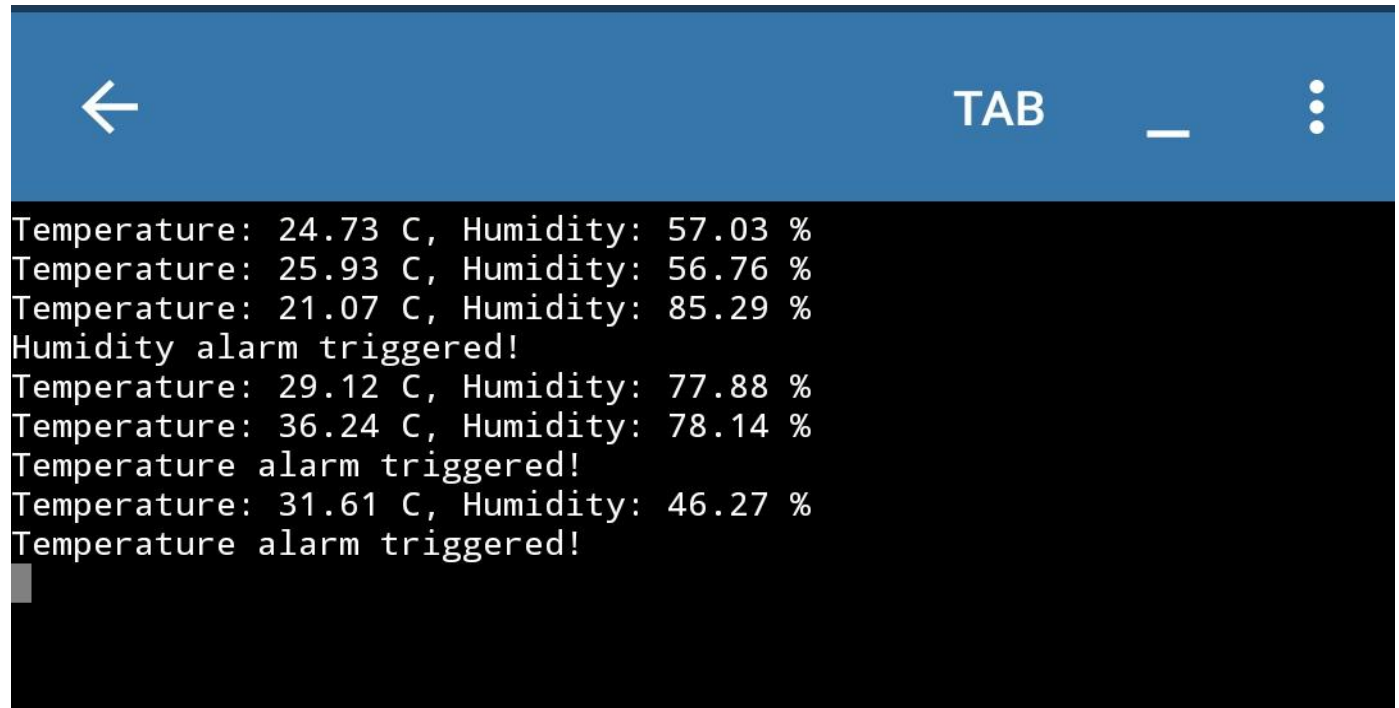# IBM ASSIGNMENT 2- IOT DOMAIN

Code:

```python
import random
import time

# Define the threshold values for temperature and humidity
TEMP_THRESHOLD = 30 # in Celsius
HUMIDITY_THRESHOLD = 80 # in percentage

# Function to generate random temperature and humidity values
def generate_values():
    temp = random.uniform(20, 40) # generate temperature between
20 and 40 Celsius
    humidity = random.uniform(40, 90) # generate humidity between
40% and 90%
    return temp, humidity
# Main loop to generate values and check for alarms
while True:
    temp, humidity = generate_values()
    print(f"Temperature: {temp:.2f} C, Humidity: {humidity:.2f} %")
# Check for temperature and humidity alarms
    if temp > TEMP_THRESHOLD:
        print("Temperature alarm triggered!")
    if humidity > HUMIDITY_THRESHOLD:
        print("Humidity alarm triggered!")
 # Wait for some time before generating the next values
    time.sleep(5)
```

Output:

```
Temperature: 24.73 C, Humidity: 57.03 %
Temperature: 25.93 C, Humidity: 56.76 %
Temperature: 21.07 C, Humidity: 85.29 %
Humidity alarm triggered!
Temperature: 29.12 C, Humidity: 77.88 %
Temperature: 36.24 C, Humidity: 78.14 %
Temperature alarm triggered!
Temperature: 31.61 C, Humidity: 46.27 %
Temperature alarm triggered!
```