

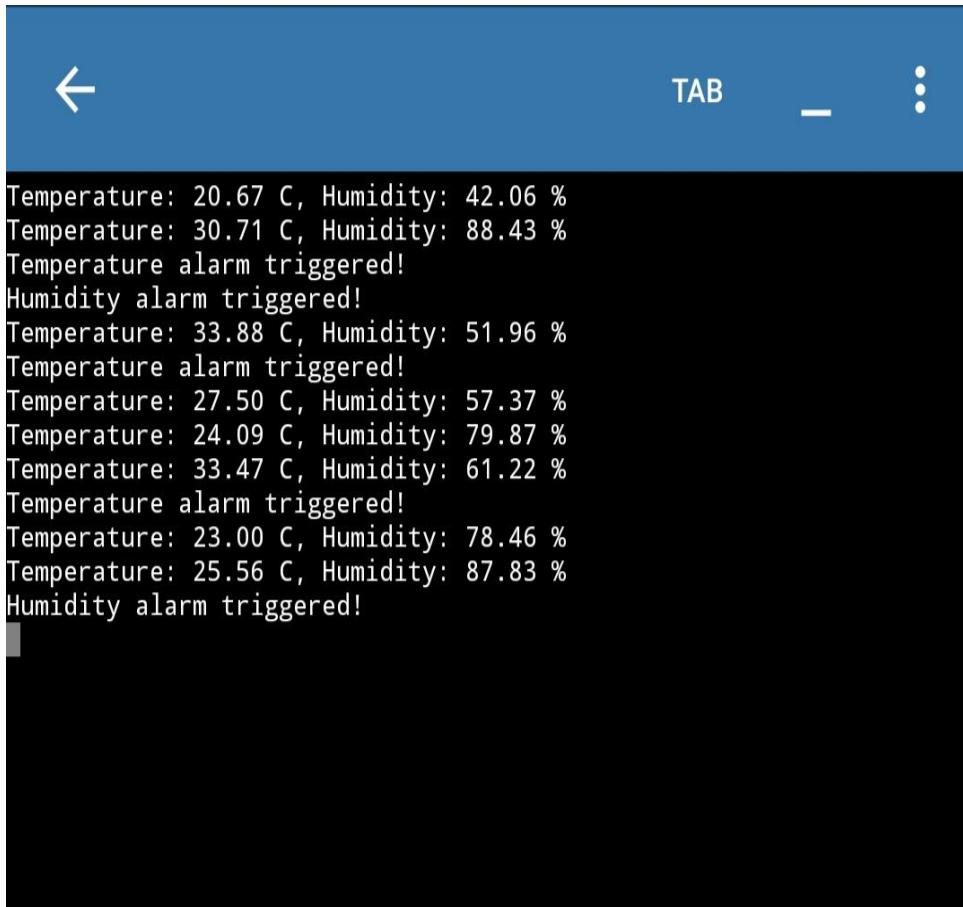
IBM ASSIGNMENT 2 - IOT DOMAIN

CODE:

```
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)
```

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OUTPUT:



```
← TAB _ ⋮
Temperature: 20.67 C, Humidity: 42.06 %
Temperature: 30.71 C, Humidity: 88.43 %
Temperature alarm triggered!
Humidity alarm triggered!
Temperature: 33.88 C, Humidity: 51.96 %
Temperature alarm triggered!
Temperature: 27.50 C, Humidity: 57.37 %
Temperature: 24.09 C, Humidity: 79.87 %
Temperature: 33.47 C, Humidity: 61.22 %
Temperature alarm triggered!
Temperature: 23.00 C, Humidity: 78.46 %
Temperature: 25.56 C, Humidity: 87.83 %
Humidity alarm triggered!
█
```