

IBM ASSIGNMENT 2

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Q) Build a python code to continuously detect temperature and humidity values (given using random function) and alarm in case of high temperature.

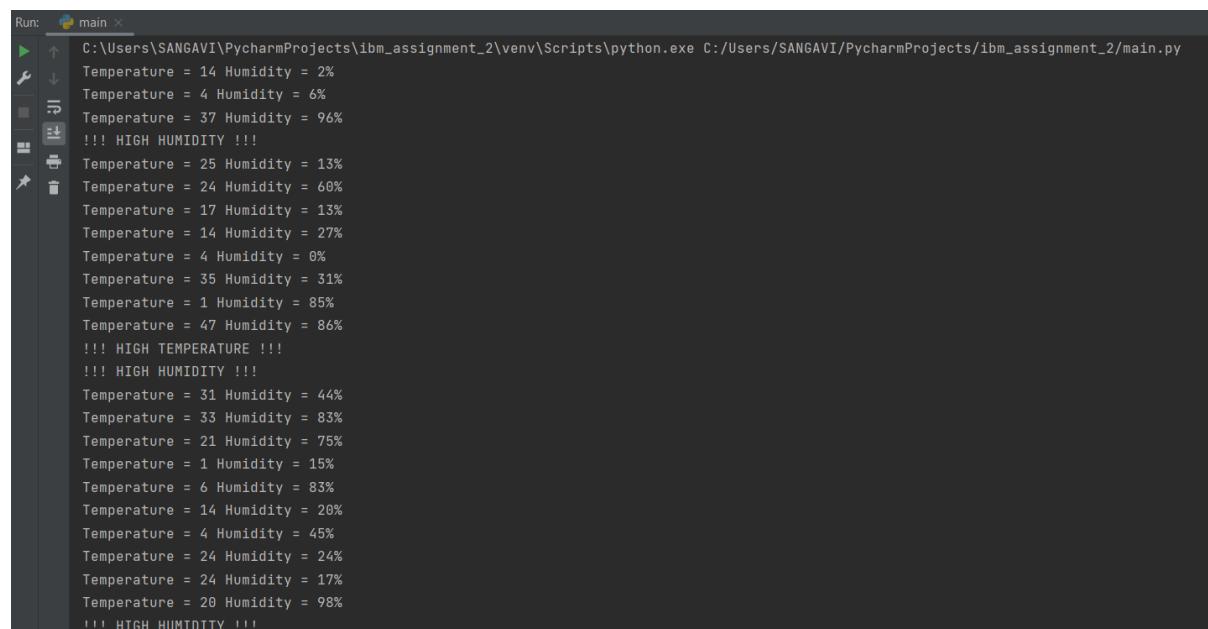
CODE

```
import random
import time

while True:
    temp = random.randint(0, 50)
    humidity = random.randint(0, 100)
    print(f"Temperature = {temp} Humidity = {humidity}%")
    if temp > 40:
        print("!!! HIGH TEMPERATURE !!!")

    if humidity > 85:
        print("!!! HIGH HUMIDITY !!!")
    time.sleep(3)
```

OUTPUT



The screenshot shows the PyCharm interface with the 'Run' tab open. The run configuration is set to 'main'. The output window displays the execution of the script, showing random temperature and humidity pairs. It also prints '!!! HIGH HUMIDITY !!!' and '!!! HIGH TEMPERATURE !!!' whenever the respective thresholds are reached. The output text is as follows:

```
Run: main ×
C:\Users\SANGAVI\PycharmProjects\ibm_assignment_2\venv\Scripts\python.exe C:/Users/SANGAVI/PycharmProjects/ibm_assignment_2/main.py
Temperature = 14 Humidity = 2%
Temperature = 4 Humidity = 6%
Temperature = 37 Humidity = 96%
!!! HIGH HUMIDITY !!!
Temperature = 25 Humidity = 13%
Temperature = 24 Humidity = 60%
Temperature = 17 Humidity = 13%
Temperature = 14 Humidity = 27%
Temperature = 4 Humidity = 0%
Temperature = 35 Humidity = 31%
Temperature = 1 Humidity = 85%
Temperature = 47 Humidity = 86%
!!! HIGH TEMPERATURE !!!
!!! HIGH HUMIDITY !!!
Temperature = 31 Humidity = 44%
Temperature = 33 Humidity = 83%
Temperature = 21 Humidity = 75%
Temperature = 1 Humidity = 15%
Temperature = 6 Humidity = 83%
Temperature = 14 Humidity = 20%
Temperature = 4 Humidity = 45%
Temperature = 24 Humidity = 24%
Temperature = 24 Humidity = 17%
Temperature = 20 Humidity = 98%
!!! HIGH HUMIDITY !!!
```