

ASSIGNMENT 2

```
import random

import winsound

# generate random temperature and humidity values

temperature = random.uniform(20, 40) # in Celsius

humidity = random.uniform(30, 70) # in percentage

# set threshold values for temperature and humidity

temp_threshold = 30 # in Celsius

humidity_threshold = 30 # in percentage

# define frequency and duration for alarm sound

freq = 2500 # in hertz

dur = 1000 # in milliseconds

# check if temperature or humidity exceed threshold values

if temperature > temp_threshold and humidity > humidity_threshold:

    print("ALERT: High temperature and high humidity detected!")

    winsound.Beep(freq, dur)

elif temperature > temp_threshold:

    print("ALERT: High temperature detected!")

    winsound.Beep(freq, dur)

elif humidity > humidity_threshold:

    print("ALERT: High humidity detected!")

    winsound.Beep(freq, dur)

else:

    print("Temperature:", temperature, "C, Humidity:", humidity, "%")
```

IDLE Shell 3.11.3

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Python 3.11.3 (tags/v3.11.3:f3909b8, Apr 4 2023, 23:49:59) [MSC v.1934 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: C:/Users/SASS/Downloads/Assignment 2.py =====

ALERT: High temperature and high humidity detected!

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