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 or humidity > humidity_threshold:
    if temperature > temp_threshold and humidity > humidity_threshold:
        print("ALERT: High temperature ({:.1f}C) and high humidity ({:.1f}%) detected!".format(temperature, humidity))
    elif temperature > temp_threshold:
        print("ALERT: High temperature ({:.1f}C) detected!".format(temperature))
    else:
        print("ALERT: High humidity ({:.1f}%) detected!".format(humidity))

    winsound.Beep(freq, dur)
else:
```

```
print("Temperature: {:.1f}C, Humidity: {:.1f}%".format(temperature, humidity))
```

OUTPUT: