

ASSIGNMENT NO:2

Temperature and humidity detection

Done by
M.ArunPrasad
III-Year
Department of ECE
AVS Engineering College

TASK:

Build python code, Generate Temperature and Humidity values (Use Random function to generate values) and write a condition to detect an alarm in case of high temperature and humidity.
For ex: Temperature is greater than 30C play alarm sound and same for humidity.

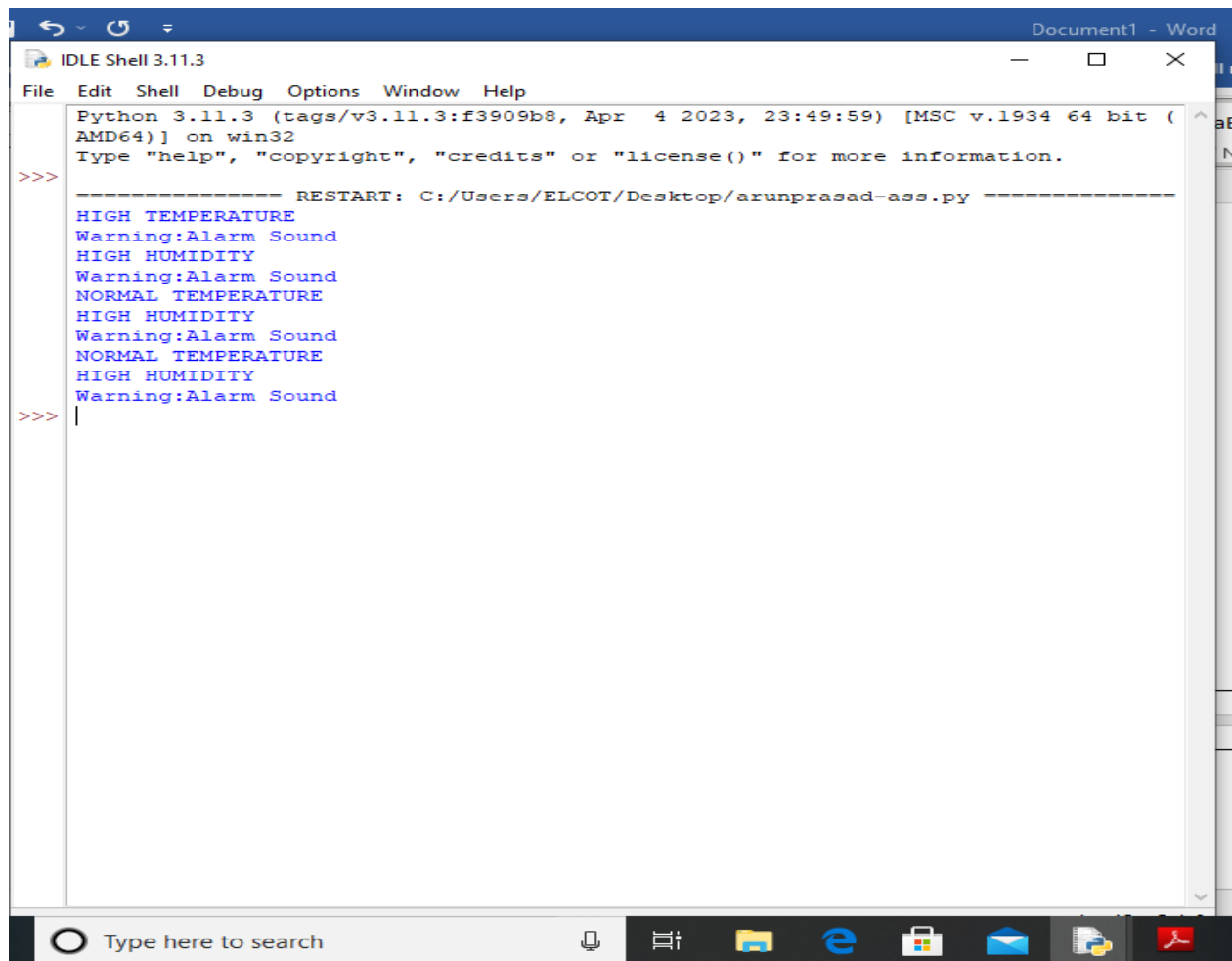
CODING:

```
import random
import winsound
for i in range(3):
    temperature=random.randint(-15,100)
    humidity=random.randint(10,50)
    if(temperature>35):
        print("HIGH TEMPERATURE")
        print("Warning:Alarm Sound")
        winsound.Beep(1000,3000)
    else:
        print("NORMAL TEMPERATURE")
```

```
if(humidity>30):  
    print("HIGH HUMIDITY")  
    print("Warning:Alarm Sound")  
    winsound.Beep(1000,3000)  
else:  
    print("NORMAL HUMIDITY")
```

OUTPUT:

The output of this source code is shown below.



```
IDLE Shell 3.11.3  
File Edit Shell Debug Options Window Help  
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/ELCOT/Desktop/arunprasad-ass.py =====  
HIGH TEMPERATURE  
Warning:Alarm Sound  
HIGH HUMIDITY  
Warning:Alarm Sound  
NORMAL TEMPERATURE  
HIGH HUMIDITY  
Warning:Alarm Sound  
NORMAL TEMPERATURE  
HIGH HUMIDITY  
Warning:Alarm Sound  
>>> |
```