

Assignment -2

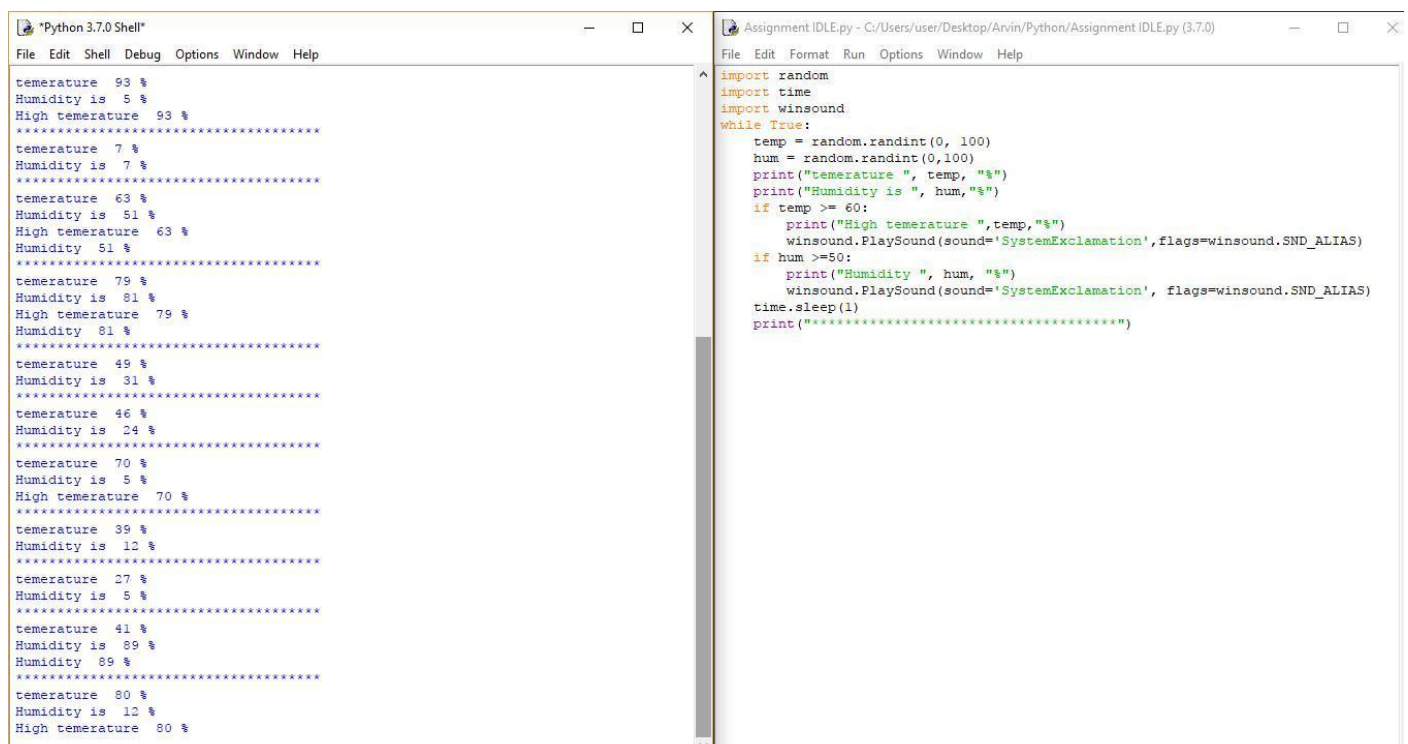
Assignment Date	21 September 2022
Student Name	Arunkumar S.
Student Roll Number	611219106004
Maximum Marks	2 Marks

Question-1: Build a python code, Assume u get temperature and humidity values (generated with random function to a variable) and write a condition to continuously detect alarm in case of high temperature.

Solution:

```
import random
import time
import winsound
while True:
    temp = random.randint(0, 100)
    hum = random.randint(0,100)
    print("temerature ", temp, "%")
    print("Humidity is ", hum,"%")
    if temp >= 60:
        print("High temerature ",temp,"%")
        winsound.PlaySound(sound='SystemExclamation',flags=winsound.SND_
        ALIAS)
    if hum >=50:
        print("Humidity ", hum, "%")
        winsound.PlaySound(sound='SystemExclamation',
        flags=winsound.SND_ALIAS)
    time.sleep(1)
    print("*****")
```

Circuit :



The screenshot displays a Python IDE with two windows. The left window, titled "Python 3.7.0 Shell", shows the output of the code, which consists of multiple lines of temperature and humidity readings, followed by a high temperature alert. The right window, titled "Assignment IDLE.py", shows the source code of the program, which uses the random module to generate temperature and humidity values and the winsound module to play a system exclamation sound when the temperature is high.

```
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
temerature 93 %
Humidity is 5 %
High temerature 93 %
*****
temerature 7 %
Humidity is 7 %
*****
temerature 63 %
Humidity is 51 %
High temerature 63 %
Humidity 51 %
*****
temerature 79 %
Humidity is 81 %
High temerature 79 %
Humidity 81 %
*****
temerature 49 %
Humidity is 31 %
*****
temerature 46 %
Humidity is 24 %
*****
temerature 70 %
Humidity is 5 %
High temerature 70 %
*****
temerature 39 %
Humidity is 12 %
*****
temerature 27 %
Humidity is 5 %
*****
temerature 41 %
Humidity is 89 %
Humidity 89 %
*****
temerature 80 %
Humidity is 12 %
High temerature 80 %

Assignment IDLE.py - C:/Users/user/Desktop/Arvin/Python/Assignment IDLE.py (3.7.0)
File Edit Format Run Options Window Help
import random
import time
import winsound
while True:
    temp = random.randint(0, 100)
    hum = random.randint(0,100)
    print("temerature ", temp, "%")
    print("Humidity is ", hum,"%")
    if temp >= 60:
        print("High temerature ",temp,"%")
        winsound.PlaySound(sound='SystemExclamation',flags=winsound.SND_ALIAS)
    if hum >=50:
        print("Humidity ", hum, "%")
        winsound.PlaySound(sound='SystemExclamation', flags=winsound.SND_ALIAS)
    time.sleep(1)
    print("*****")
```