

Assignment -2
Python Programming

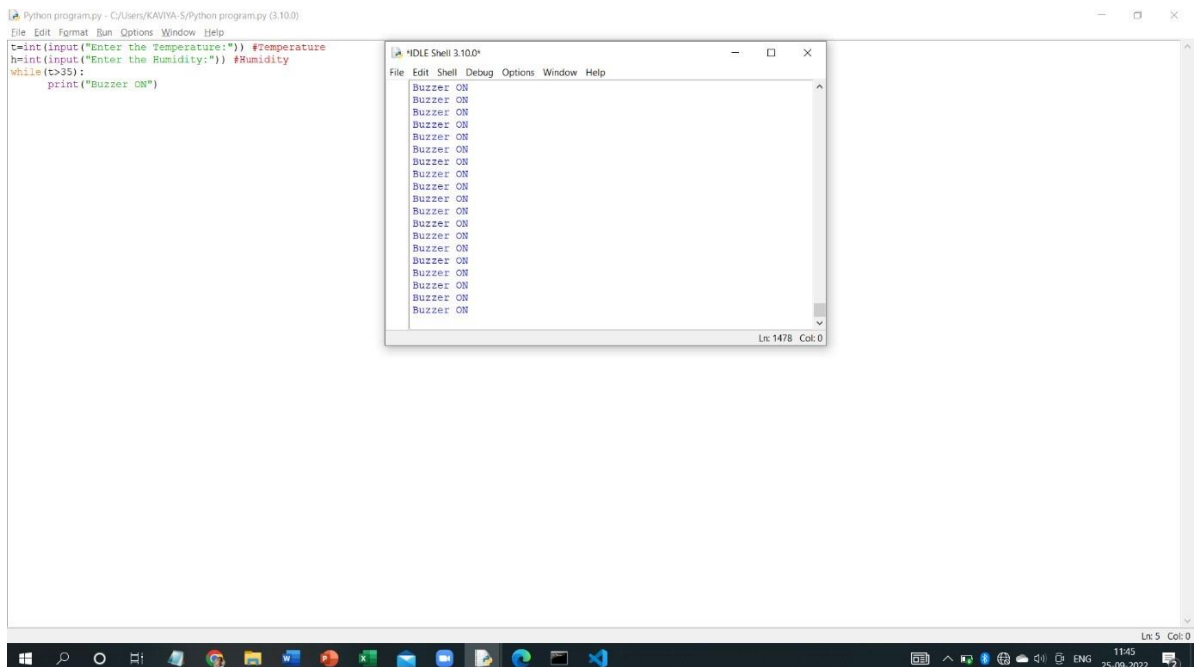
Assignment Date	26 September 2022
Student Name	Ms. Kavipriya R
Student Roll Number	621319106039
Maximum Marks	2 Marks

Question-1:

Build a python code, Assume you 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.

Program:

```
t=int(input("Enter the Temperature:")) #Temperature
h=int(input("Enter the Humidity:")) #Humidity
while(t>35): print("Buzzer ON")
```



The screenshot shows a Python program running in IDLE Shell 3.10.0. The program prompts for Temperature and Humidity, and then enters a while loop that prints 'Buzzer ON' repeatedly as long as the temperature is greater than 35. The output window shows 'Buzzer ON' printed 15 times.

```

Program: import time from
random import randint
file=open("data.txt","a")
n=5 for i in range(n):
    humidity=randint(0,100)+1
    temperature=randint(-
100,100)+1 if humidity>45:
    print("\n \n Humidity High")
    print(humidity)

    file.write("\nHumidity")
    file.write(str(humidity))

if temperature>30:
    print("Temperature High")
    print( temperature)

    file.write("\nTemperature")
    file.write(str(temperature))
time.sleep(1) file.close()

```

The screenshot shows a Python IDE window titled 'Python Team Lead.py - C:/Users/KAVIYA-S/Python Team Lead.py (3.10.0)'. The code in the editor is as follows:

```

import time
from random import randint
file=open("data.txt","a")
n=5
for i in range(n):
    humidity=randint(0,100)+1
    temperature=randint(-100,100)+1
    if humidity>45:
        print("\n \n Humidity High")
        print(humidity)

        file.write("\nHumidity")
        file.write(str(humidity))

    if temperature>30:
        print("Temperature High")
        print( temperature)

        file.write("\nTemperature")
        file.write(str(temperature))
    time.sleep(1)
file.close()

```

An 'IDLE Shell 3.10.0' window is open, showing the output of the script. It displays a restart message and then the following output:

```

>>>
===== RESTART: C:/Users/KAVIYA-S/Python Team Lead.py =====
Temperature High
93

Humidity High
82
Temperature High
36
Temperature High
57

Humidity High
60
Temperature High
68

Humidity High
55
>>>

```

The taskbar at the bottom shows the system clock as 20:14 on 26-09-2022.