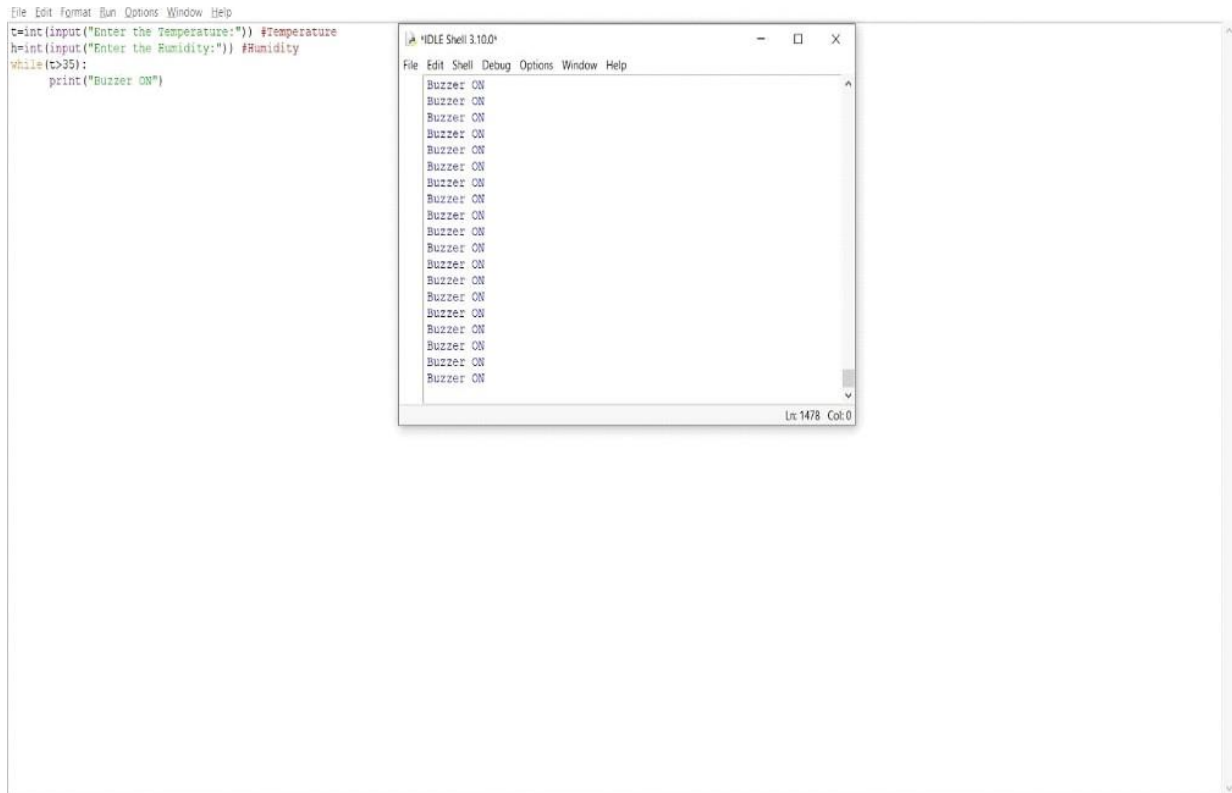


Assignment -2

Python Programming

Team ID	PNT2022TMID06438
Name	VISHNUPRIYA S
Project Name	GAS LEAKAGE MONITORING AND ALERTING SYSTEM
Team Members	1 PURNACHANDRIGAA R 2 SELVANAYAKI M 3 VISHNUPRIYA S 4 KIRIRAJ S

Question-1:



The screenshot shows an IDLE Shell 3.10.0 window. The shell has a menu bar with 'File', 'Edit', 'Shell', 'Debug', 'Options', 'Window', and 'Help'. The main text area displays the following Python code:

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

The output of the program is visible in the shell, showing the text 'Buzzer ON' printed repeatedly, indicating that the condition `t > 35` is being met.

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")
```

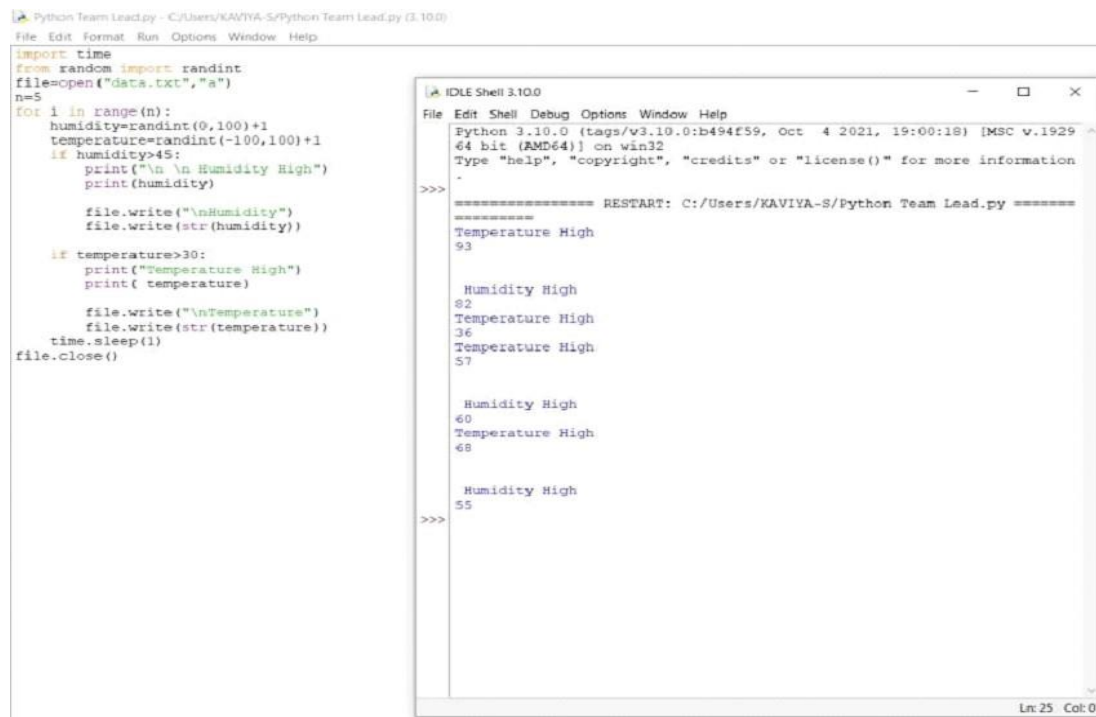
Program:

```
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 displays a Python IDE with two windows. The left window, titled 'Python Team Lead.py - C:/Users/KAVIYA-S/Python Team Lead.py (3,100)', contains the following code:

```
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 right window, titled 'IDLE Shell 3.10.0', shows the output of the program's execution:

```
Python 3.10.0 (tags/v3.10.0:b494f59, Oct 4 2021, 19:00:18) [MSC v.1929  
64 bit (AMD64)] on win32  
Type "help", "copyright", "credits" or "license()" for more information  
>>>  
===== 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 status bar at the bottom right of the shell window indicates 'Ln: 25 Col: 0'.