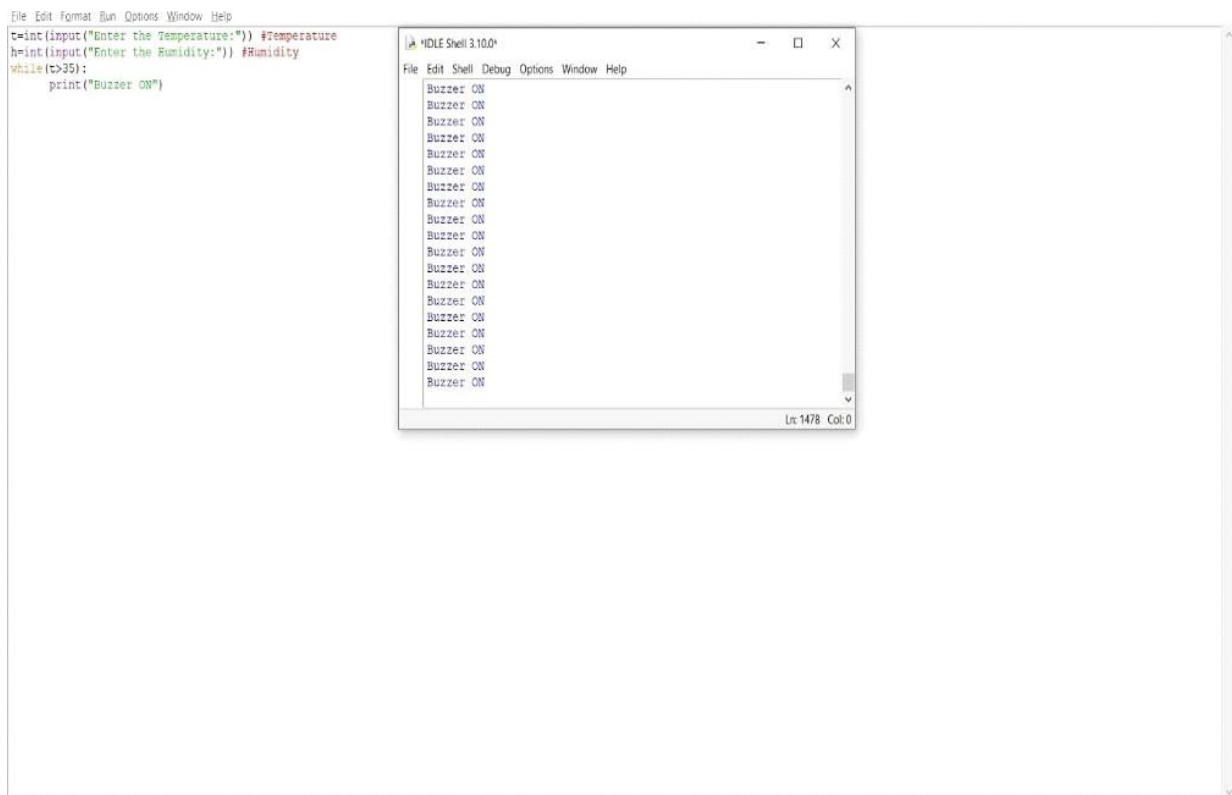


Assignment -2

Python Programming

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Project Name	GAS LEAKAGE MONITORING AND ALERTING SYSTEM
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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")
```

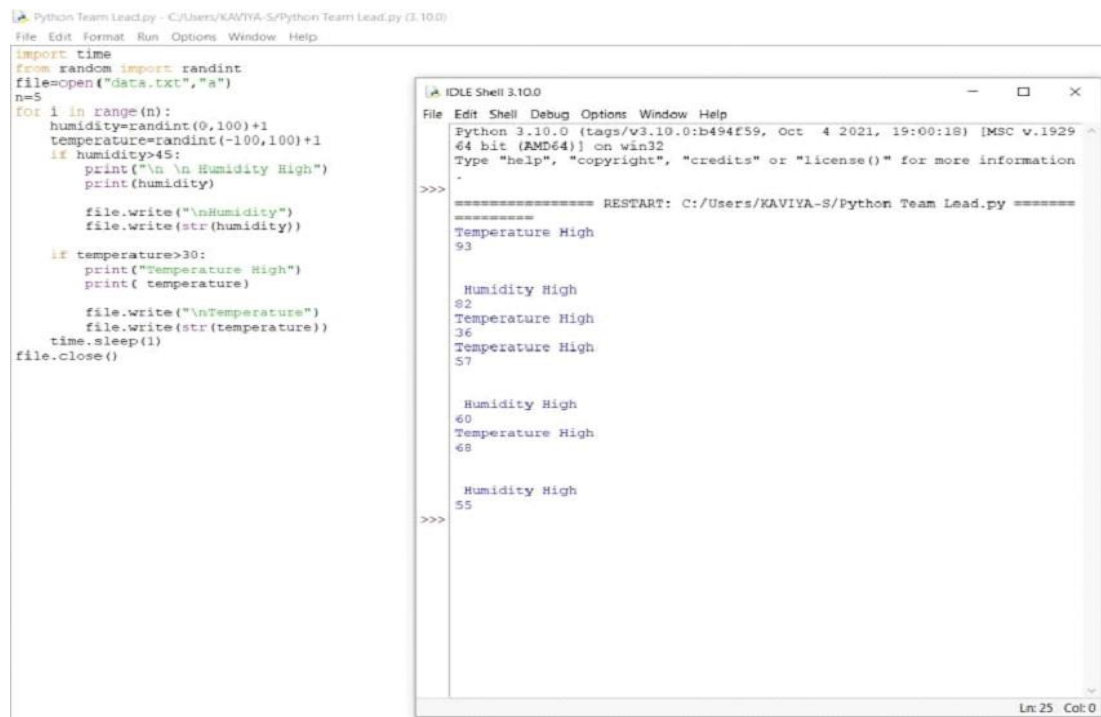
Program:

```
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 window titled 'Python Team Lead.py - C:/Users/KAVIYA-S/Python Team Lead.py (3,100)'. 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()
```

To the right, the 'IDLE Shell 3.10.0' window shows the execution output. It starts with a restart message and then displays the results of the loop:

```
===== 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'.