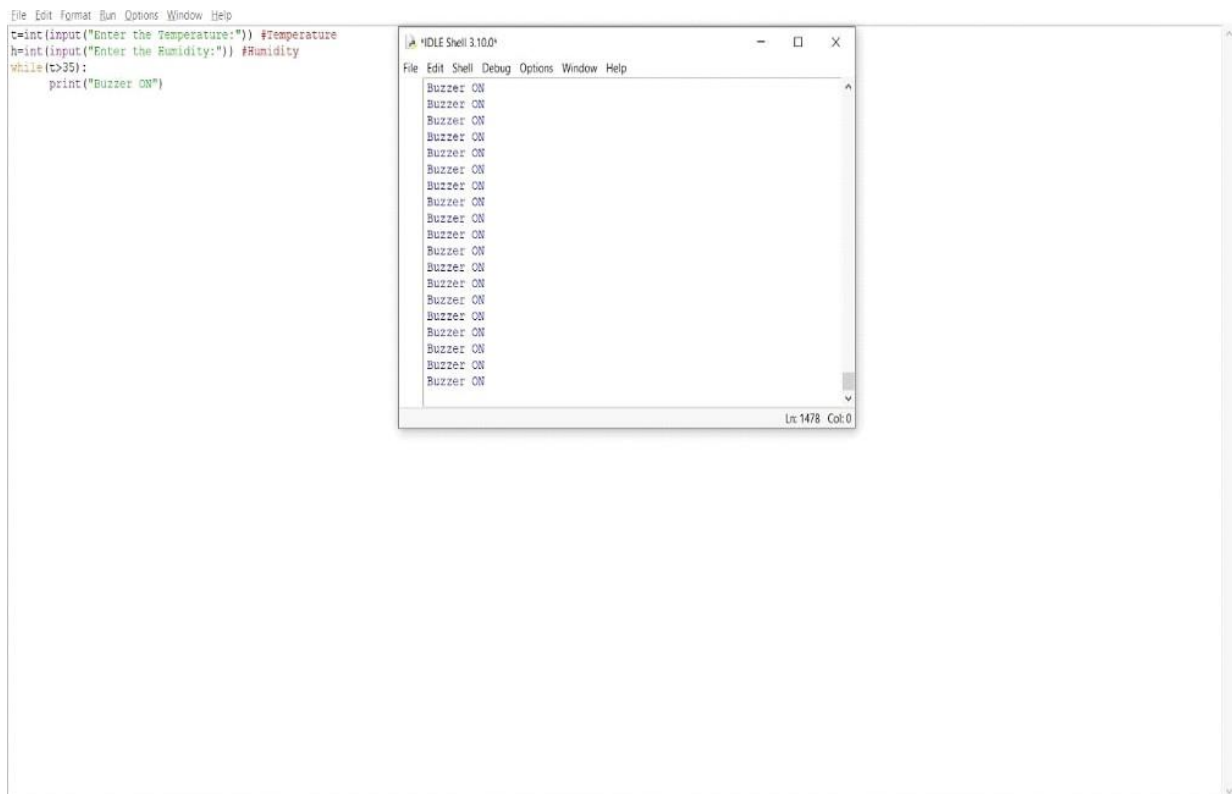


Assignment -2

Python Programming

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Project Name	GAS LEAKAGE MONITORING AND ALERTING SYSTEM
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Question-1:



The screenshot shows a Python IDE with a code editor on the left and a shell window on the right. The code editor contains the following Python code:

```
File Edit Format Run Options Window Help
t=int(input("Enter the Temperature:")) #Temperature
h=int(input("Enter the Humidity:")) #Humidity
while(t>35):
    print("Buzzer ON")
```

The shell window, titled "IDLE Shell 3.10.0", displays the output of the code, which is "Buzzer ON" repeated 15 times. The status bar at the bottom of the shell window indicates "Ln: 1478 Col: 0".

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")
```

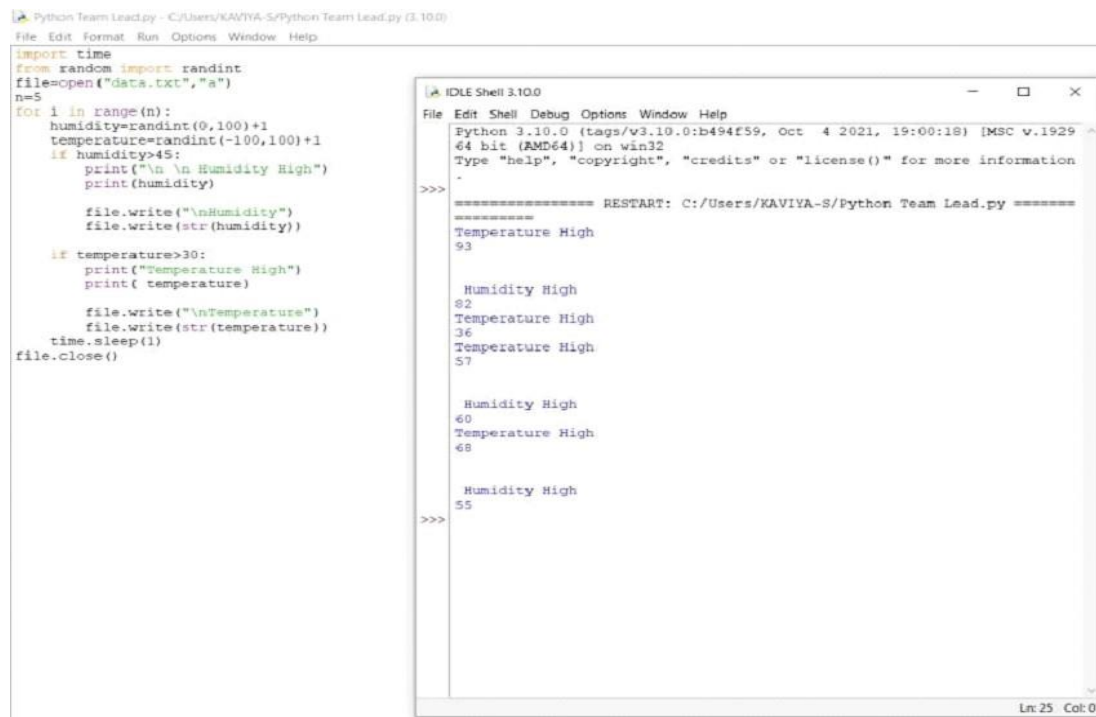
Program:

```
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', 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'.