

Assignment -1

Python Programming

| | |
|---------------------|-------------------|
| Assignment Date | 26 September 2022 |
| Student Name | Ms. Kaviya S |
| Student Roll Number | 621319106040 |
| 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 Windows desktop with a taskbar at the bottom. The taskbar includes icons for the Start menu, search, and several applications: File Explorer, Microsoft Word, PowerPoint, Excel, Outlook, and a web browser. The active window is titled "Python program.py - C:/Users/KANVIA-S/Python program.py (3.10.0)". It displays a Python script with the following 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("Buzzzer ON")
```

Below the code editor, the "IDLE Shell 3.10.0" window is open, showing the execution output. The menu bar for the shell includes File, Edit, Shell, Debug, Options, Window, and Help. The output area displays 14 lines of "Buzzzer ON", indicating that the loop has executed 14 times. The status bar at the bottom of the shell window shows "Ln: 1478 Col: 0".

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 editor displays the same Python script as shown in the previous block. Below the code editor, there is a console window titled 'IDLE Shell 3.10.0'. The console output shows the results of the script's execution, including the printed messages and the data written to the file. The output is as follows:

```
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
>>>
```