

Assignment -1

Python Programming

Assignment Date	26 September 2022
Student Name	Mr. Gokulnath. S
Student Roll Number	621319106021
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.

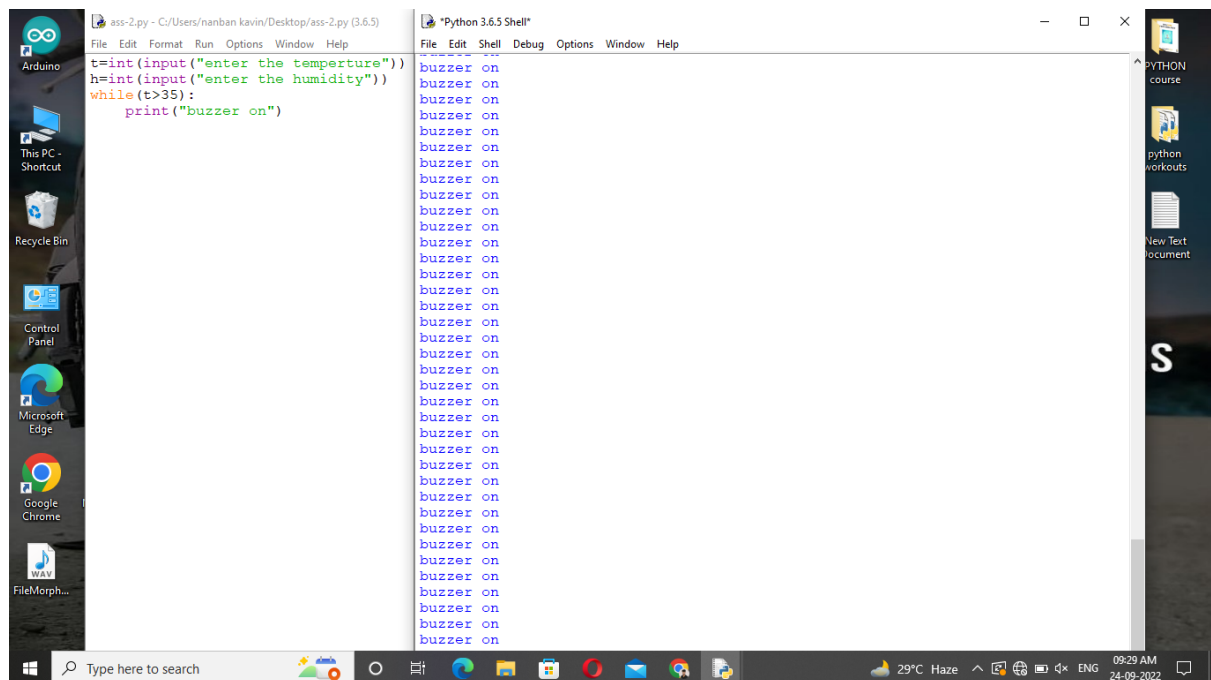
Program:

```
t=int(input("enter the temperature"))
```

```
h=int(input("enter the humidity"))
```

```
while(t>35):
```

```
print("buzzer on")
```



Program 2:

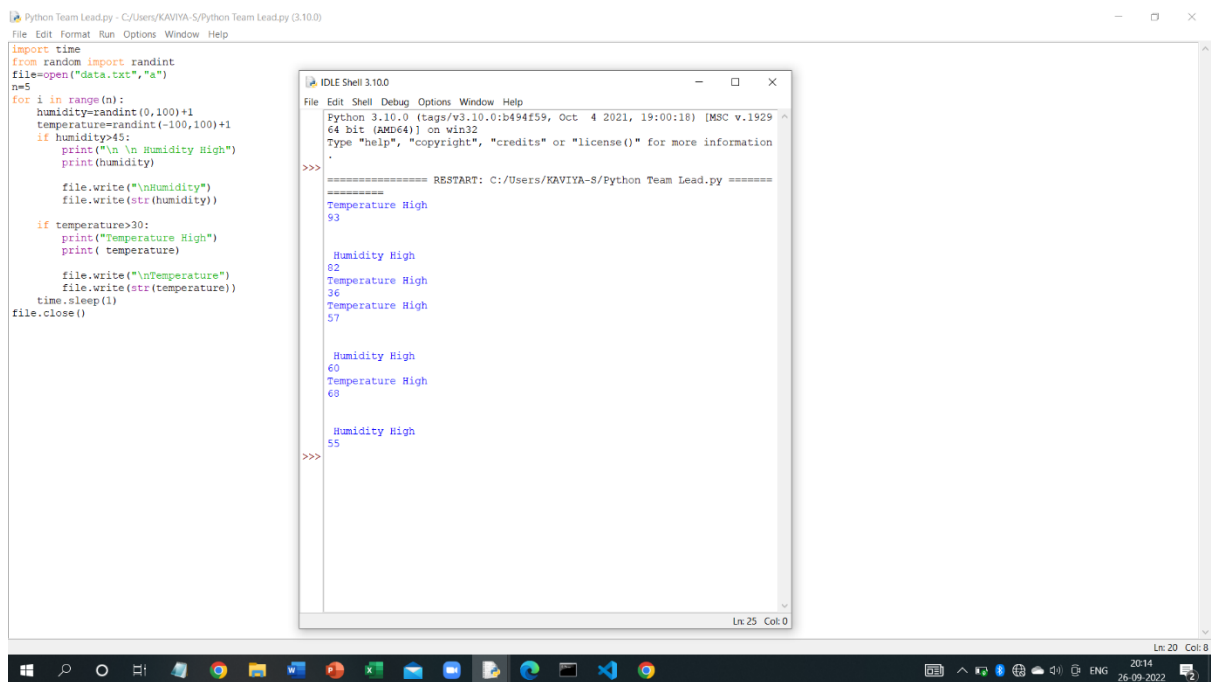
```
import time
from random import randint
file=open("data.txt","a")
n=5
for i in range(n):
    humidity=randint(0,100)+1
    temperature=randint(-100,100)+1
    if humidity>45:
        print("\n \n Humidity High")
        print(humidity)

        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 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 IDLE Shell window shows the output of the program:

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