

Assignment -2

Python Programming

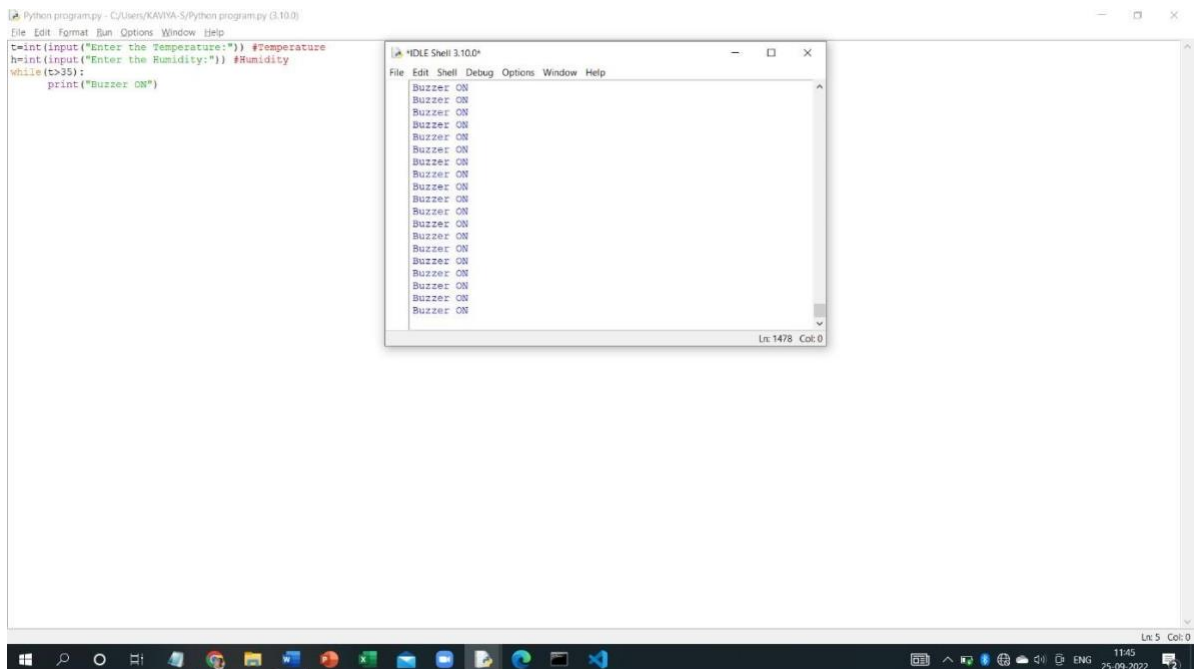
Assignment Date	29 October 2022
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Question-1:

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 shows a Python IDE window titled 'Python Team Lead.py - C:/Users/KAVIYA-S/Python Team Lead.py (3.10.0)'. 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()

```

Below the editor, an 'IDLE Shell 3.10.0' window displays the output of the script. It shows a restart message and then prints the generated values for humidity and temperature, with some values exceeding the thresholds defined in the code.

```

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.