

Assignment -2
Python Programming

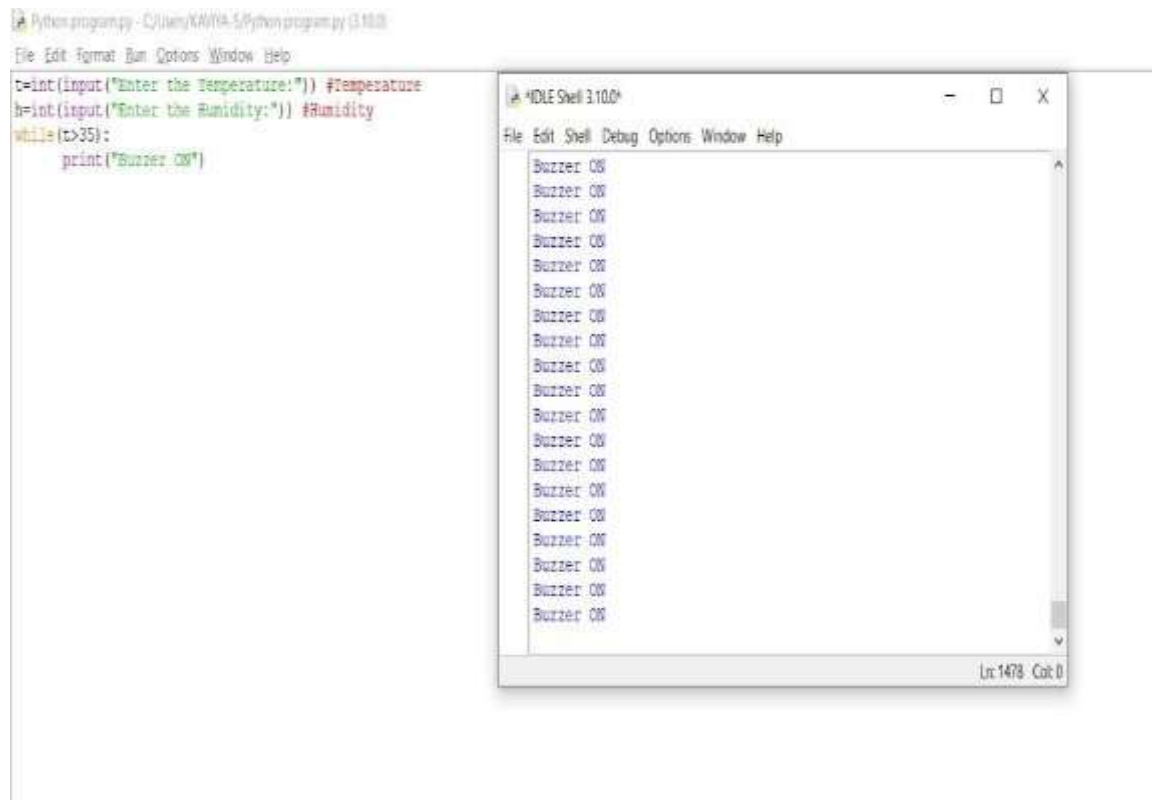
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Question-1:

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")
```



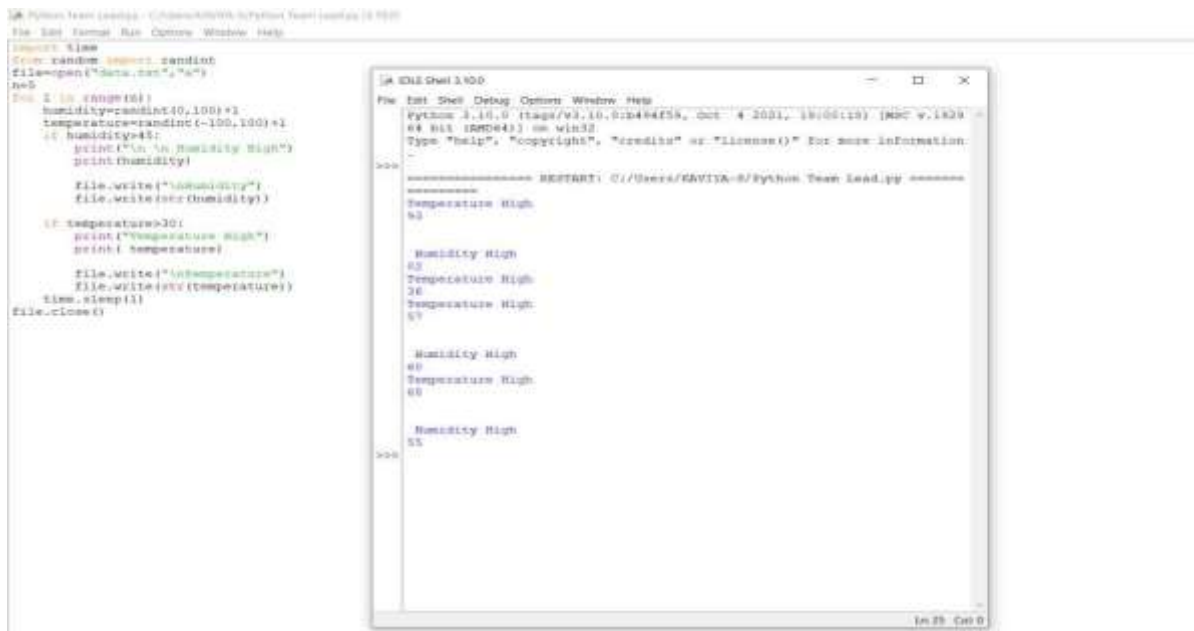
Program:

```
import time
import 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 shows the source code for a program that generates random humidity and temperature values and writes them to a file named 'data.txt'. The right window shows the output of the program, which prints 'Humidity High' and 'Temperature High' messages along with the generated values.

```
Python Team Lead.py - C:\Users\RAVIA\Python Team Lead.py [v.1.0.0]
File Edit Format Run Console Window Help

Source View
C:\Users\RAVIA\Python Team Lead.py
import time
import 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()
```

```
Python 3.10.0 (tags/v3.10.0:2b44f55, Oct 4 2021, 19:06:19) [AMD64]
>>>
===== RESTART: C:\Users\RAVIA\Python Team Lead.py =====
>>>
Temperature High
45

Humidity High
60
Temperature High
20
Temperature High
55

Humidity High
40
Temperature High
60

Humidity High
55
>>>
```