

Assignment -2
To get temperature and humidity value

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| Assignment Date | 26 September 2022 |
| Student Name | Ms. Gayathri V |
| Student Roll Number | 9517201903044 |
| Maximum Marks | 2 Marks |

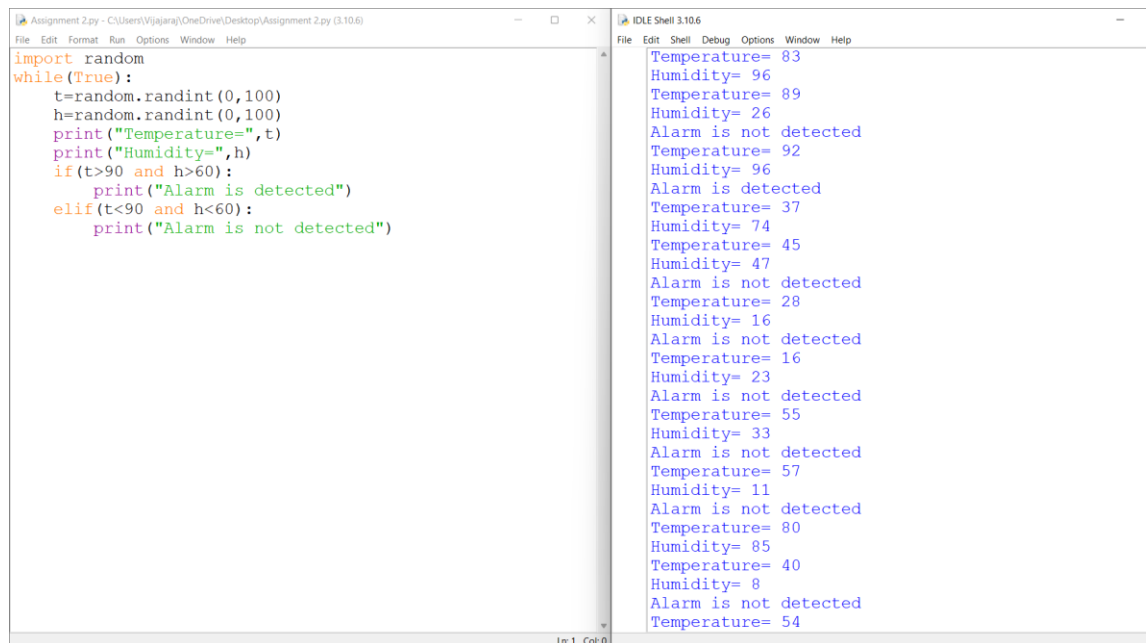
Question-1:

Python program to get temperature and humidity values with random function variable and write condition to continuously detect alarm in case of high temperature.

Solution:

```
import random
while (True):
    t=random.randint(0,100)
    h=random.randint(0,100)
    print("Temperature=",t)
    print("Humidity=",h)
    if (t>90 and h>60):
        print("Alarm is detected")
    elif (t<90 and h<60):
        print("Alarm is not detected")
```

Output:



The screenshot shows a Python IDE with two windows. The left window displays the code from the solution, and the right window shows the output of the program. The code is a while loop that generates random temperature (t) and humidity (h) values. It prints these values and checks if an alarm should be detected based on the conditions: t > 90 and h > 60. The output shows a series of random values for temperature and humidity, with corresponding 'Alarm is detected' or 'Alarm is not detected' messages.

```
import random
while (True):
    t=random.randint(0,100)
    h=random.randint(0,100)
    print("Temperature=",t)
    print("Humidity=",h)
    if (t>90 and h>60):
        print("Alarm is detected")
    elif (t<90 and h<60):
        print("Alarm is not detected")
```

```
Temperature= 83
Humidity= 96
Temperature= 89
Humidity= 26
Alarm is not detected
Temperature= 92
Humidity= 96
Alarm is detected
Temperature= 37
Humidity= 74
Temperature= 45
Humidity= 47
Alarm is not detected
Temperature= 28
Humidity= 16
Alarm is not detected
Temperature= 16
Humidity= 23
Alarm is not detected
Temperature= 55
Humidity= 33
Alarm is not detected
Temperature= 57
Humidity= 11
Alarm is not detected
Temperature= 80
Humidity= 85
Temperature= 40
Humidity= 8
Alarm is not detected
Temperature= 54
```