

## ASSIGNMENT - 2

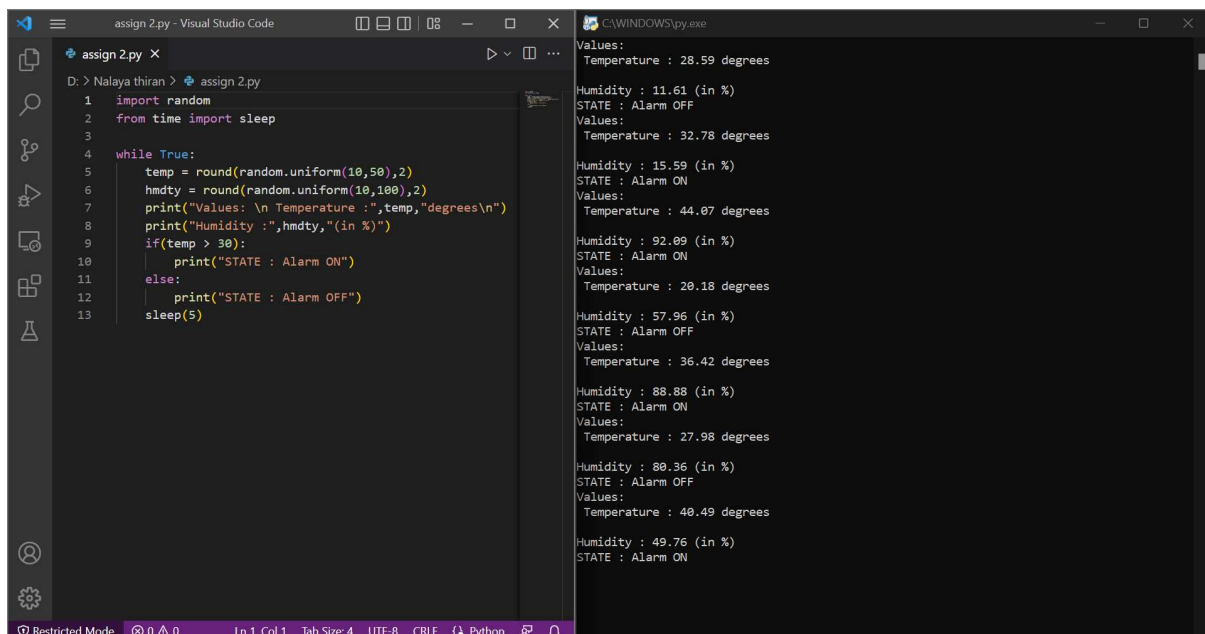
BUILD A PYTHON CODE, ASSUME U GET TEMPERATURE AND HUMIDITY VALUES (GENERATED WITH RANDOM FUNCTION TO A VARIABLE) AND WRITE A CONDITION TO CONTINUOUSLY DETECT ALARM IN CASE OF HIGH TEMPERATURE.

### CODE:

```
import random
from time import sleep

while True:
    temp = round(random.uniform(10,50),2)
    hmdty = round(random.uniform(10,100),2)
    print("Values: \n Temperature :",temp,"degrees\n")
    print("Humidity :",hmdty,"(in %)")
    if(temp > 30):
        print("STATE : Alarm ON")
    else:
        print("STATE : Alarm OFF")
    sleep(5)
```

### OUTPUT:



The screenshot displays a Visual Studio Code editor with a file named 'assign 2.py'. The code in the editor is a Python script that generates random temperature and humidity values and checks if the temperature is above 30 degrees to trigger an alarm. The output window on the right shows the execution results, including the generated values and the resulting alarm state.

```
assign 2.py - Visual Studio Code
D: > Nalaya thiran > assign 2.py
1 import random
2 from time import sleep
3
4 while True:
5     temp = round(random.uniform(10,50),2)
6     hmdty = round(random.uniform(10,100),2)
7     print("Values: \n Temperature :",temp,"degrees\n")
8     print("Humidity :",hmdty,"(in %)")
9     if(temp > 30):
10         print("STATE : Alarm ON")
11     else:
12         print("STATE : Alarm OFF")
13     sleep(5)
```

Output:

```
Values:
Temperature : 28.59 degrees
Humidity : 11.61 (in %)
STATE : Alarm OFF
Values:
Temperature : 32.78 degrees
Humidity : 15.59 (in %)
STATE : Alarm ON
Values:
Temperature : 44.07 degrees
Humidity : 92.09 (in %)
STATE : Alarm ON
Values:
Temperature : 20.18 degrees
Humidity : 57.96 (in %)
STATE : Alarm OFF
Values:
Temperature : 36.42 degrees
Humidity : 88.88 (in %)
STATE : Alarm ON
Values:
Temperature : 27.98 degrees
Humidity : 80.36 (in %)
STATE : Alarm OFF
Values:
Temperature : 40.49 degrees
Humidity : 49.76 (in %)
STATE : Alarm ON
```