

Assignment 2

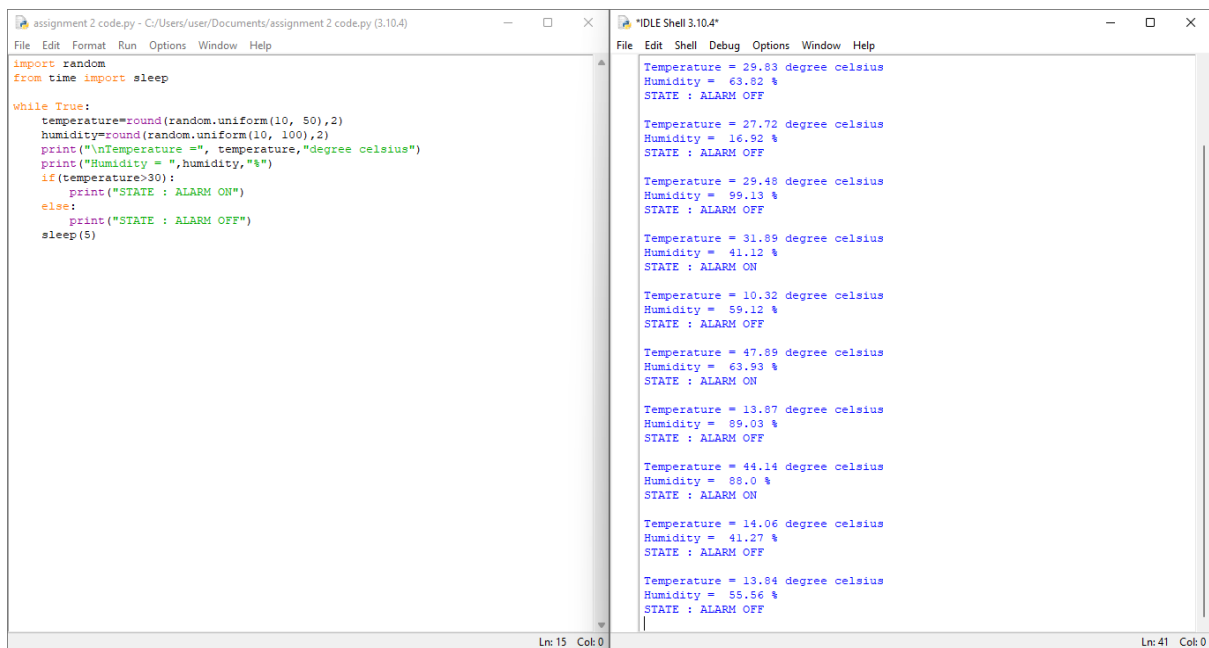
Build a python code, assume u get temperature and humidity values (generated with random function to a variable) and write a condition to continuously detect alarm in case of high temperature.

CODE:

```
import random
from time import sleep

while True:
    temperature=round(random.uniform(10, 50),2)
    humidity=round(random.uniform(10, 100),2)
    print("\nTemperature =", temperature,"degree celsius")
    print("Humidity = ",humidity,"%")
    if(temperature>32):
        print("STATE : ALARM ON")
    else:
        print("STATE : ALARM OFF")
    sleep(5)
```

OUTPUT:



The screenshot displays a Python IDE with two windows. The left window, titled 'assignment 2 code.py', shows the source code. The right window, titled '*IDLE Shell 3.10.4*', shows the output of the program. The code generates random temperature and humidity values and checks if the temperature is above 32 degrees Celsius to trigger an alarm.

```
assignment 2 code.py - C:/Users/user/Documents/assignment 2 code.py (3.10.4)
File Edit Format Run Options Window Help

import random
from time import sleep

while True:
    temperature=round(random.uniform(10, 50),2)
    humidity=round(random.uniform(10, 100),2)
    print("\nTemperature =", temperature,"degree celsius")
    print("Humidity = ",humidity,"%")
    if(temperature>32):
        print("STATE : ALARM ON")
    else:
        print("STATE : ALARM OFF")
    sleep(5)

Ln: 15 Col: 0
```

```
*IDLE Shell 3.10.4*
File Edit Shell Debug Options Window Help

Temperature = 29.83 degree celsius
Humidity = 63.82 %
STATE : ALARM OFF

Temperature = 27.72 degree celsius
Humidity = 16.92 %
STATE : ALARM OFF

Temperature = 29.48 degree celsius
Humidity = 99.13 %
STATE : ALARM OFF

Temperature = 31.89 degree celsius
Humidity = 41.12 %
STATE : ALARM ON

Temperature = 10.32 degree celsius
Humidity = 99.12 %
STATE : ALARM OFF

Temperature = 47.89 degree celsius
Humidity = 63.93 %
STATE : ALARM ON

Temperature = 13.87 degree celsius
Humidity = 99.03 %
STATE : ALARM OFF

Temperature = 44.14 degree celsius
Humidity = 88.0 %
STATE : ALARM ON

Temperature = 14.06 degree celsius
Humidity = 41.27 %
STATE : ALARM OFF

Temperature = 13.84 degree celsius
Humidity = 55.56 %
STATE : ALARM OFF

Ln: 41 Col: 0
```