

Assignment 2

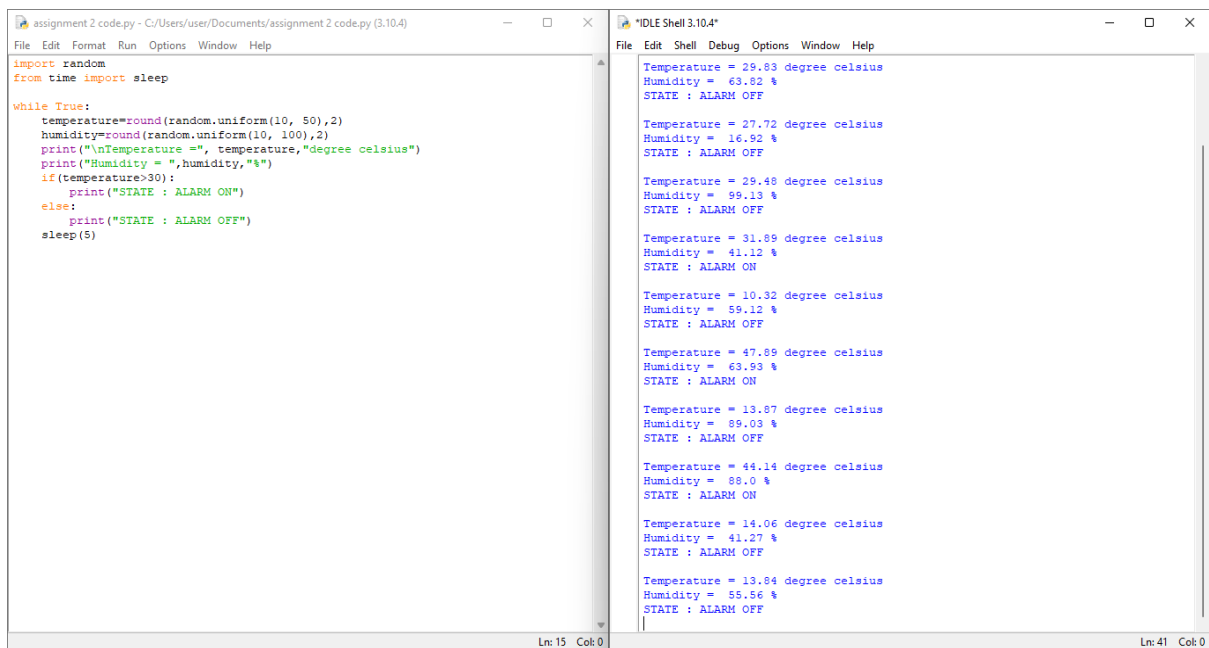
Build a python code, assume u get temperature and humidity values (generated with random function to a variable) and write a condition to continuously detect alarm in case of high temperature.

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 - C:/Users/user/Documents/assignment 2 code.py (3.10.4)', contains the Python code. The right window, titled '*IDLE Shell 3.10.4*', shows the output of the code. The code generates random temperature and humidity values and checks if the temperature is above 32 degrees Celsius to trigger an alarm. The output shows several iterations of these values and the corresponding alarm status.

```
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 = 59.12 %
STATE : ALARM OFF

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

Temperature = 13.87 degree celsius
Humidity = 89.03 %
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
```