

Assignment -2

Python Programming

Assignment Date	26 September 2022
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Student Roll Number	621319106105
Maximum Marks	2 Marks

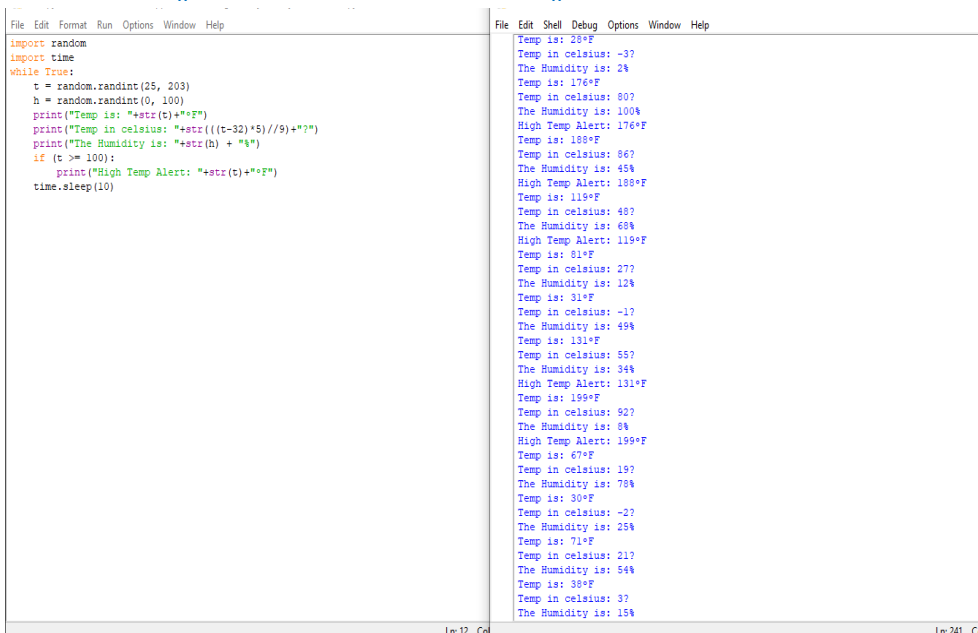
Question-1:

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.

Solution

:

```
import random
import time
while True:
    t = random.randint(25, 203)
    h = random.randint(0, 100)
    print("Temp is: "+str(t)+"°F")
    print("Temp in celsius: "+str(((t-32)*5)//9)+"°C")
    print("The Humidity is: "+str(h) + "%")
    if (t >= 100):
        print("High Temperature Alert: "+str(t)+"°F")
        time.sleep(10)
#-----#
#-----#
```



The screenshot shows a Python IDE with two panes. The left pane displays the code from the solution, and the right pane shows the output of the program. The code is a loop that generates random temperature and humidity values, prints them, and triggers a high temperature alert if the temperature is 100°F or higher. The output shows multiple iterations of this process, with temperature values ranging from -3°F to 203°F and humidity values from 0% to 100%.

```
File Edit Format Run Options Window Help
import random
import time
while True:
    t = random.randint(25, 203)
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    print("Temp is: "+str(t)+"°F")
    print("Temp in celsius: "+str(((t-32)*5)//9)+"°C")
    print("The Humidity is: "+str(h) + "%")
    if (t >= 100):
        print("High Temp Alert: "+str(t)+"°F")
        time.sleep(10)
#-----#
#-----#
```

```
File Edit Shell Debug Options Window Help
Temp is: 28°F
Temp in celsius: -3°
The Humidity is: 2%
Temp is: 176°F
Temp in celsius: 80°
The Humidity is: 100%
High Temp Alert: 176°F
Temp is: 188°F
Temp in celsius: 86°
The Humidity is: 45%
High Temp Alert: 188°F
Temp is: 119°F
Temp in celsius: 49°
The Humidity is: 68%
High Temp Alert: 119°F
Temp is: 81°F
Temp in celsius: 27°
The Humidity is: 12%
Temp is: 31°F
Temp in celsius: -1°
The Humidity is: 49%
Temp is: 131°F
Temp in celsius: 55°
The Humidity is: 34%
High Temp Alert: 131°F
Temp is: 199°F
Temp in celsius: 92°
The Humidity is: 8%
High Temp Alert: 199°F
Temp is: 67°F
Temp in celsius: 19°
The Humidity is: 78%
Temp is: 30°F
Temp in celsius: -2°
The Humidity is: 25%
Temp is: 71°F
Temp in celsius: 21°
The Humidity is: 54%
Temp is: 38°F
Temp in celsius: 3°
The Humidity is: 15%
```

Ln: 12 Col: Ln: 241 Col: