

Assignment 2

Assignment date	29th September 2022
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Maximum marks	2 marks

Question:

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(1!=0):

    temperature = random.random()

    humidity = random.random()

    print("Temperature: ", "%.3f" % temperature)

    print("Humidity: ", "%.3f" % humidity)

    time.sleep(2)

    if (temperature > 0.5):

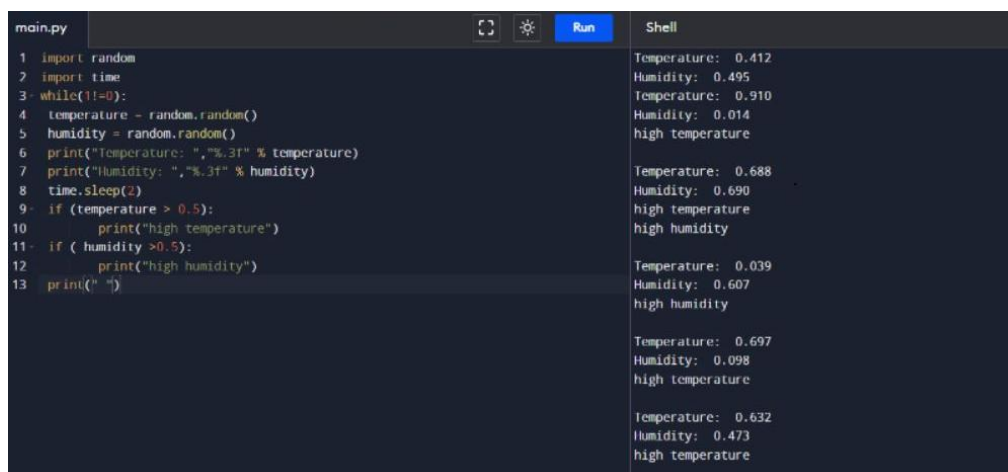
        print("high temperature")

    if ( humidity >0.5):

        print("high humidity")

    print(" ")
```

Output:



The screenshot shows a code editor with a file named 'main.py' and a 'Shell' window displaying the output of the Python code. The code is a loop that generates random temperature and humidity values, prints them, and checks for high values (greater than 0.5) to trigger an alarm. The output shows several iterations of these values and the corresponding alarm messages.

```
main.py  Run  Shell
1 import random
2 import time
3 while(1!=0):
4     temperature = random.random()
5     humidity = random.random()
6     print("Temperature: ", "%.3f" % temperature)
7     print("Humidity: ", "%.3f" % humidity)
8     time.sleep(2)
9     if (temperature > 0.5):
10         print("high temperature")
11     if ( humidity >0.5):
12         print("high humidity")
13     print(" ")

Temperature: 0.412
Humidity: 0.495
Temperature: 0.910
Humidity: 0.014
high temperature

Temperature: 0.688
Humidity: 0.690
high temperature
high humidity

Temperature: 0.039
Humidity: 0.607
high humidity

Temperature: 0.697
Humidity: 0.098
high temperature

Temperature: 0.632
Humidity: 0.473
high temperature
```