Assignment - 2

Python programming

Assignment Date	28 September 2022
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Maximum Marks	2 Marks

Question :

Build a Python code. Assume you get temperature and humidity values (generated with random function to a variable) and write a condition to continuously detect the alarm in case of high temperature.

Solution:

```
from random import randint;          # importing random function to get value
from time import sleep;              # to make alarm beep on interval of time
second  =  2;
temperature  =  randint(-23,134);
print("Temperature in Fahrenheit",temperature);
humidity = randint(0,100);
print("Humidity in percentage",humidity);
while(temperature >68);             # Based on normal room temperature
sleep(second);
print("temperature is high\a");     # use keyboard interrupt to stop the alarm
#-------------------------------------------#
#-------------------------------------------#
```

Screenshot for normal reading on temperature:

```
main.py                                        Run     Shell

1  from random import randint; # random function to get value    Temperature in Fahrenheit 41
2  from time import sleep;  #  to make the alarm beeps in interval of time    Humidity in percentage 76
3  second = 2;                                                    >
4  temperature = randint(-23,134);
5  print("Temperature in Fahrenheit",temperature);
6  humidity = randint(0,100);
7  print("Humidity in percentage", humidity);
8  while(temperature >68): #Based on normal room temperature
9      sleep(second);
10     print("Temperature is high\a ") # use keyboard interrupt as stop button
           for alarm
11
12
```

Screenshot for high reading on temperature:

```
main.py                                        Run     Shell

1  from random import randint; # random function to get value    Temperature in Fahrenheit 104
2  from time import sleep;  #  to make the alarm beeps in interval of time    Humidity in percentage 55
3  second = 2;                                                    Temperature is high
4  temperature = randint(-23,134);                               Temperature is high
5  print("Temperature in Fahrenheit",temperature);              Temperature is high
6  humidity = randint(0,100);                                    Temperature is high
7  print("Humidity in percentage", humidity);                   Temperature is high
8  while(temperature >68): #Based on normal room temperature     Temperature is high
9      sleep(second);                                            Temperature is high
10     print("Temperature is high\a ") # use keyboard interrupt as stop button   Temperature is high
           for alarm                                             Temperature is high
11                                                               Temperature is high
12                                                               Temperature is high
                                                                 Temperature is high
                                                                 Temperature is high
```