

ASSIGNMENT 2

Python Program

Assignment Date	21 September 2022
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Maximum Marks	2 Marks

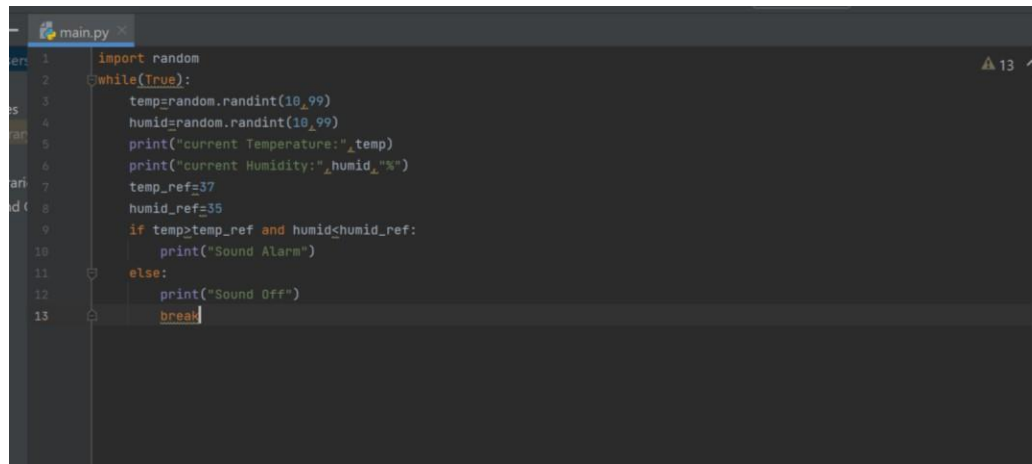
Question-1

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.

Code:

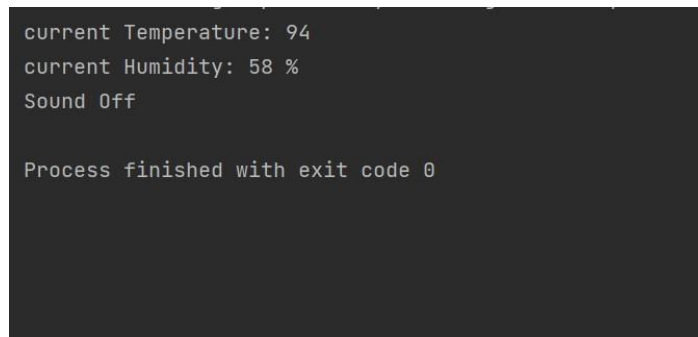
```
import random
while(True):
    temp=random.randint(10,99)
    humid=random.randint(10,99)
    print("current Temperature:",temp)
    print("current Humidity:",humid,"%")
    temp_ref=37
    humid_ref=35
    if temp>temp_ref and humid<humid_ref:
        print("Sound Alarm")
    else:
        print("Sound Off")
        break
```

Result:

A screenshot of a code editor window titled 'main.py'. The code is a Python script that imports the 'random' module and enters a 'while(True):' loop. Inside the loop, it generates random temperature and humidity values using 'random.randint(10,99)'. It then prints these values: 'current Temperature: 94' and 'current Humidity: 58 %'. Below the prints, it sets reference values 'temp_ref=37' and 'humid_ref=35'. An 'if' statement checks if the current values are greater than the references; if true, it prints 'Sound Alarm', otherwise it prints 'Sound Off'. The loop ends with a 'break' statement. The code is as follows:

```
1 import random
2 while(True):
3     temp=random.randint(10,99)
4     humid=random.randint(10,99)
5     print("current Temperature:",temp)
6     print("current Humidity:",humid,"%")
7     temp_ref=37
8     humid_ref=35
9     if temp>temp_ref and humid>humid_ref:
10         print("Sound Alarm")
11     else:
12         print("Sound Off")
13     break
```

Output:

A screenshot of a terminal window showing the output of the Python script. It displays the printed values for temperature and humidity, followed by 'Sound Off'. At the bottom, it states 'Process finished with exit code 0'. The output is as follows:

```
current Temperature: 94
current Humidity: 58 %
Sound Off

Process finished with exit code 0
```