

ASSIGNMENT 2

Python Program

Assignment Date	21 September 2022
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Maximum Marks	2 Marks

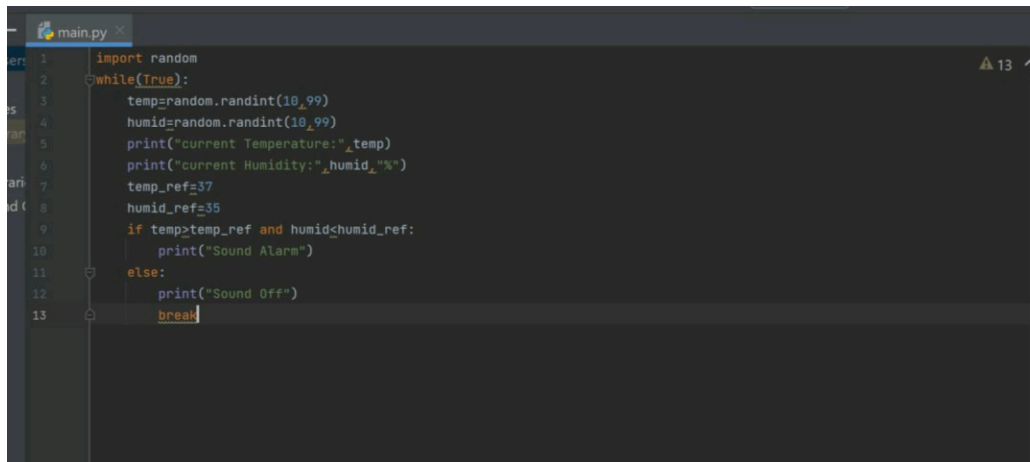
Question-1

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:

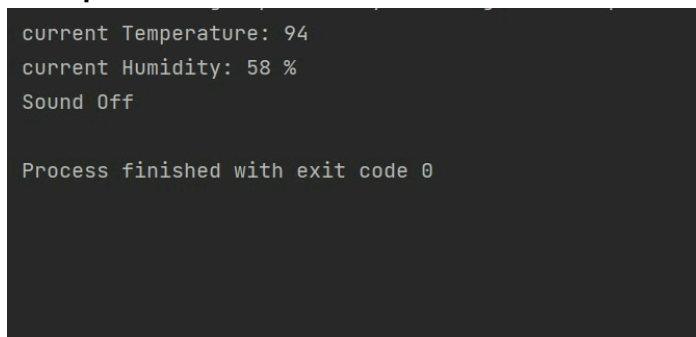
```
import random
while(True):
    temp=random.randint(10,99)
    humid=random.randint(10,99)
    print("current Temperature:",temp)
    print("current Humidity:",humid,"%")
    temp_ref=37
    humid_ref=35
    if temp>temp_ref and humid<humid_ref:
        print("Sound Alarm")
    else:
        print("Sound 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, prints them, and checks if the temperature is above a reference value (37) and humidity is below a reference value (35). If both conditions are met, it prints 'Sound Alarm', otherwise it prints 'Sound Off'. The loop is terminated by a 'break' statement at the end of the code block.

```
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 current temperature and humidity values, followed by the sound status. The process ends with an exit code of 0.

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

Process finished with exit code 0
```