

ASSIGNMENT – 2

PYTHON PROGRAMMING

Assignment Date	28-09-2022
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Maximum Marks	2 Marks

QUESTION 1:

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 alarm in case of high temperature.

SOLUTION:

```
import random

while(True):

    temperature=random.randint(20,120)

    humidity=random.randint(20,120)

    print(temperature)

    print(humidity)

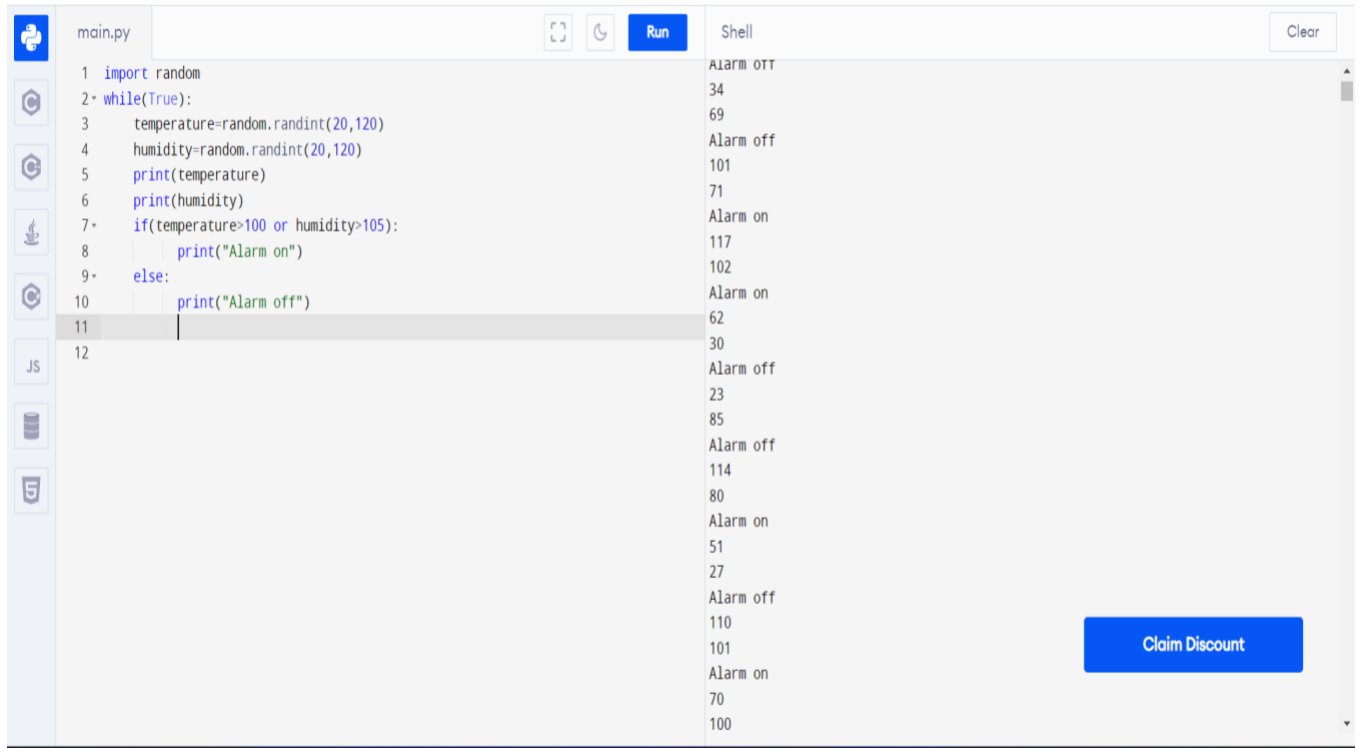
    if(temperature>100 or humidity>105):

        print("Alarm on")

    else:

        print("Alarm off")
```

OUTPUT:



The screenshot shows a code editor with a file named `main.py`. The code is a Python script that generates random temperature and humidity values and prints an alarm status based on thresholds. The output in the shell shows the sequence of values and the resulting alarm status.

```
1 import random
2 while(True):
3     temperature=random.randint(20,120)
4     humidity=random.randint(20,120)
5     print(temperature)
6     print(humidity)
7     if(temperature>100 or humidity>105):
8         print("Alarm on")
9     else:
10        print("Alarm off")
11
12
```

Shell Output:

```
Alarm off
34
69
Alarm off
101
71
Alarm on
117
102
Alarm on
62
30
Alarm off
23
85
Alarm off
114
80
Alarm on
51
27
Alarm off
110
101
Alarm on
70
100
```

A blue button labeled "Claim Discount" is visible in the bottom right corner of the shell output area.