

ASSIGNMENT-2

Team Members:

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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.

Solution:

```
import random
```

```
Temperature = random.sample(range(0,120) , 10)
```

```
print("Temperature Data = ", Temperature)
```

```
Humidity = random.sample(range(40,90), 10)
```

```
print("Humidity Data =", Humidity)
```

```
for i in Temperature:
```

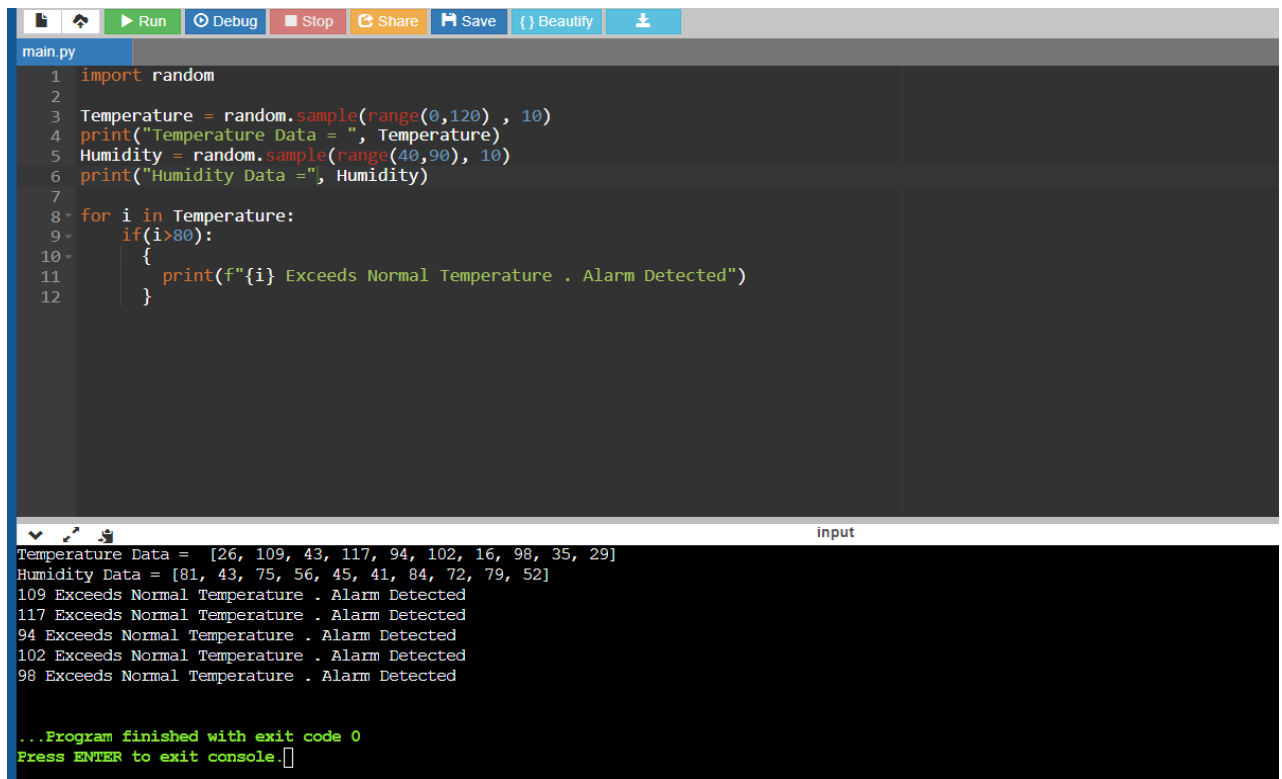
```
    if(i>80):
```

```
        {
```

```
            print(f"{i} Exceeds Normal Temperature . Alarm Detected")
```

```
        }
```

Output:



The image shows a screenshot of a code editor with a dark theme. The editor has a toolbar at the top with buttons for Run, Debug, Stop, Share, Save, Beautify, and a download icon. The file name 'main.py' is visible in the top left. The code is as follows:

```
1 import random
2
3 Temperature = random.sample(range(0,120) , 10)
4 print("Temperature Data = ", Temperature)
5 Humidity = random.sample(range(40,90), 10)
6 print("Humidity Data =", Humidity)
7
8 for i in Temperature:
9     if(i>80):
10        {
11            print(f"{i} Exceeds Normal Temperature . Alarm Detected")
12        }
```

The output window at the bottom shows the following text:

```
Temperature Data = [26, 109, 43, 117, 94, 102, 16, 98, 35, 29]
Humidity Data = [81, 43, 75, 56, 45, 41, 84, 72, 79, 52]
109 Exceeds Normal Temperature . Alarm Detected
117 Exceeds Normal Temperature . Alarm Detected
94 Exceeds Normal Temperature . Alarm Detected
102 Exceeds Normal Temperature . Alarm Detected
98 Exceeds Normal Temperature . Alarm Detected

...Program finished with exit code 0
Press ENTER to exit console.
```