

**ASSIGNMENT -2**  
**PYTHON PROGRAMMING**

|                     |                   |
|---------------------|-------------------|
| Assignment Date     | 19 September 2022 |
| Student Name        | PRIYADHARSHINI.R  |
| Student Roll Number | 917719D066        |
| Maximum Marks       | 2 Marks           |

**QUESTION-1:**

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

**SOLUTION:**

Let us consider normal

temperature=40 Celsius and normal

humidity=65% '''

import random

Temperature=random.randint(1,100)

Humidity=random.randint(1,100)

print("Temperature:")

print(Temperature)

print("Humidity:")

print(Humidity)

if((Temperature>40)&(Humidity>65)):

print("Values are HIGH!!! ")

print("ALERT")

if((Temperature>40)&(Humidity<65)):

print("Tempertaure Value is HIGH!!!

") print("Check Temperature")

if((Temperature<40)&(Humidity>65)):

print("Humidity Value is HIGH!!! ")

print("Check Humidity")

if((Temperature<40)&(Humidity<65)):

print("All Values are in limit!!! ")

print("SAFE ZONE")




## OUTPUT:




```
main.py  Run  Shell
1
2 import random
3 Temperature=random.randint(1,100)
4 Humidity=random.randint(1,100)
5 print("Temperature:")
6 print(Temperature)
7 print("Humidity:")
8 print(Humidity)
9
10- if((Temperature>40)&(Humidity>65)):
11     print("Values are HIGH!!! ")
12     print("ALERT")
13- if((Temperature>40)&(Humidity<65)):
14     print("Tempertaure Value is HIGH!!! ")
15     print("Check Temperature")
16- if((Temperature<40)&(Humidity>65)):
17     print("Humidity Value is HIGH!!! ")
18     print("Check Humidity")
19- if((Temperature<40)&(Humidity<65)):
20     print("All Values are in limit!!! ")
21     print("SAFE ZONE")
22
```

```
Temperature:
19
Humidity:
56
All Values are in limit!!! |
SAFE ZONE
>
```

```
main.py  Run  Shell  Clear
1
2 import random
3 Temperature=random.randint(1,100)
4 Humidity=random.randint(1,100)
5 print("Temperature:")
6 print(Temperature)
7 print("Humidity:")
8 print(Humidity)
9
10- if((Temperature>40)&(Humidity>65)):
11     print("Values are HIGH!!! ")
12     print("ALERT")
13- if((Temperature>40)&(Humidity<65)):
14     print("Tempertaure Value is HIGH!!! ")
15     print("Check Temperature")
16- if((Temperature<40)&(Humidity>65)):
17     print("Humidity Value is HIGH!!! ")
18     print("Check Humidity")
19- if((Temperature<40)&(Humidity<65)):
20     print("All Values are in limit!!! ")
21     print("SAFE ZONE")
22
```

```
Temperature:
45
Humidity:
23
Tempertaure Value is HIGH!!!
Check Temperature
> |
```

|  |   |  |
|--|---|--|
| main.py  |    | Shell  |
| <pre>1 2 import random 3 Temperature=random.randint(1,100) 4 Humidity=random.randint(1,100) 5 print("Temperature:") 6 print(Temperature) 7 print("Humidity:") 8 print(Humidity) 9 10 if((Temperature&gt;40)&amp;(Humidity&gt;65)): 11     print("Values are HIGH!!! ") 12     print("ALERT") 13 if((Temperature&gt;40)&amp;(Humidity&lt;65)): 14     print("Tempertaure Value is HIGH!!! ") 15     print("Check Temperature") 16 if((Temperature&lt;40)&amp;(Humidity&gt;65)): 17     print("Humidity Value is HIGH!!! ") 18     print("Check Humidity") 19 if((Temperature&lt;40)&amp;(Humidity&lt;65)): 20     print("All Values are in limit!!! ") 21     print("SAFE ZONE") 22</pre> |   | <pre>Temperature: 8 Humidity: 75 Humidity Value is HIGH!!! Check Humidity &gt;</pre> |

|  |   |  |
|--|---|--|
| main.py  |    | Shell  |
| <pre>1 2 import random 3 Temperature=random.randint(1,100) 4 Humidity=random.randint(1,100) 5 print("Temperature:") 6 print(Temperature) 7 print("Humidity:") 8 print(Humidity) 9 10 if((Temperature&gt;40)&amp;(Humidity&gt;65)): 11     print("Values are HIGH!!! ") 12     print("ALERT") 13 if((Temperature&gt;40)&amp;(Humidity&lt;65)): 14     print("Tempertaure Value is HIGH!!! ") 15     print("Check Temperature") 16 if((Temperature&lt;40)&amp;(Humidity&gt;65)): 17     print("Humidity Value is HIGH!!! ") 18     print("Check Humidity") 19 if((Temperature&lt;40)&amp;(Humidity&lt;65)): 20     print("All Values are in limit!!! ") 21     print("SAFE ZONE") 22</pre> |   | <pre>Temperature: 91 Humidity: 72 Values are HIGH!!! ALERT &gt; &gt;</pre> |