

ASSIGNMENT -2
PYTHON PROGRAMMING

Assignment Date	19 September 2022
Student Name	FATHIMA D
Student Roll Number	917719D022
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	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>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</pre>	<pre>Temperature: 19 Humidity: 56 All Values are in limit!!! SAFE ZONE ></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>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</pre>	<pre>Temperature: 45 Humidity: 23 Tempertaure Value is HIGH!!! Check Temperature > </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>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</pre>		<pre>Temperature: 8 Humidity: 75 Humidity Value is HIGH!!! Check Humidity ></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>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</pre>		<pre>Temperature: 91 Humidity: 72 Values are HIGH!!! ALERT > ></pre>