

IBM NALAIYATHIRAN

ASSIGNMENT-2

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

CODE:

```
'''
```

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
<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	Run	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>