

## DEVELOP A PYTHON SCRIPT

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''' Let us consider normal temperature=40 Celsius and normal humidity=65% '''

```
import random
```

```
Temperature = random.randrange( 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")
```

```
elif((Temperature>40)&(Humidity<65)):
```

```
    print("Tempertaure Value is HIGH!!! ")
```

```
    print("Check Temperature")
```

```
elif((Temperature<40)&(Humidity>65)):

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

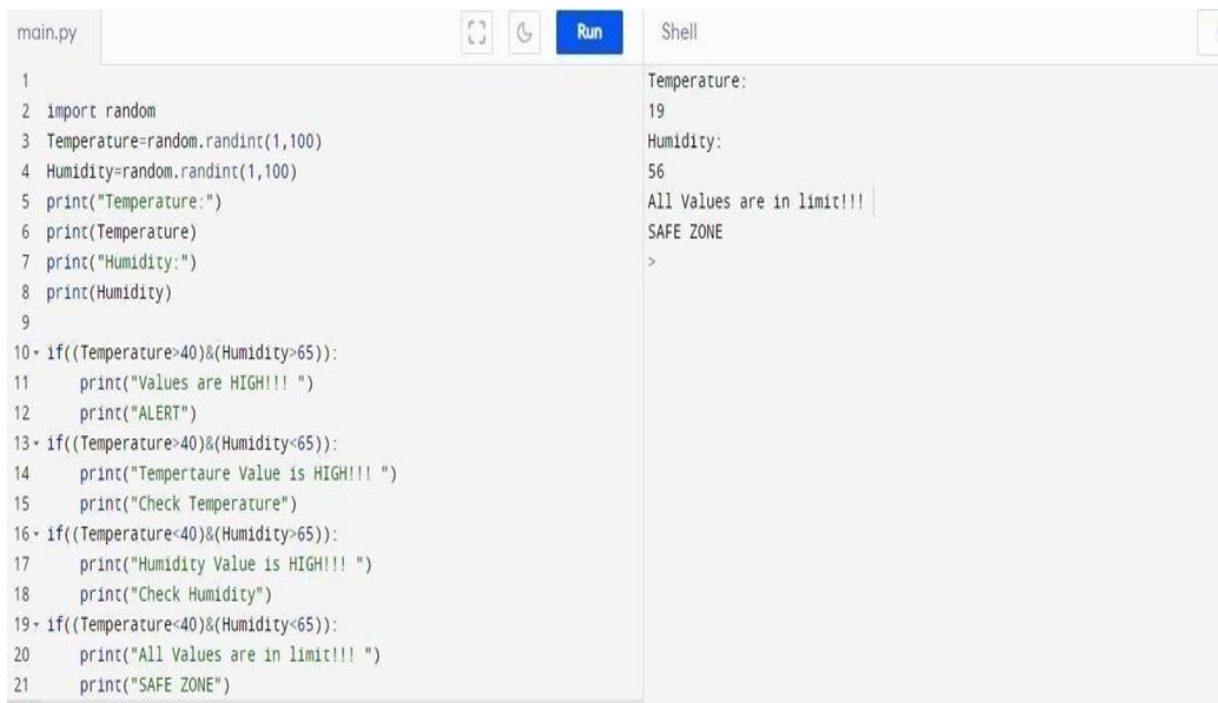
    print("Check Humidity")
```

```
elif((Temperature<40)&(Humidity<65)):

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

    print("SAFE ZONE")
```

## OUTPUT:










The screenshot shows a Python IDE with a file named 'main.py'. The code in the editor defines a function 'checkTempAndHumidity' that takes 'Temperature' and 'Humidity' as arguments. It uses nested if-elif statements to check for high values and safe zones. The 'Run' button is highlighted in blue. The 'Shell' pane on the right shows the output of the program: 'Temperature: 19', 'Humidity: 56', 'All Values are in limit!!!', and 'SAFE ZONE'.




```
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 def checkTempAndHumidity(Temperature, Humidity):
11     if((Temperature>40)&(Humidity>65)):
12         print("Values are HIGH!!! ")
13         print("ALERT")
14     elif((Temperature>40)&(Humidity<65)):
15         print("Tempertaure Value is HIGH!!! ")
16         print("Check Temperature")
17     elif((Temperature<40)&(Humidity>65)):
18         print("Humidity Value is HIGH!!! ")
19         print("Check Humidity")
20     elif((Temperature<40)&(Humidity<65)):
21         print("All Values are in limit!!! ")
22         print("SAFE ZONE")
23
24 checkTempAndHumidity(Temperature, Humidity)
25
26
```

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

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