ASSIGNMENT -2

PYTHON PROGRAMMING

Assignment Date	19 September 2022
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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

```
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")
```

Shell

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

main.py

Run

```
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
```

Shell

Clear

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

main.py

Run

```
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")
```

Shell

```
Temperature:
8
Humidity:
75
Humidity Value is HIGH!!!
Check Humidity
>
```

main.py

Run

```
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")
```

Shell

```
Temperature:
91
Humidity:
72
Values are HIGH!!!
ALERT
>
>
```