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)&(Humidity65)):

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

        print("Check Humidity")

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

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

        print("SAFE ZONE")
```

OUTPUT:

```
1   '''
2   Let us consider normal temperature=40 Celsius and normal humidity=65%
3   '''
4   import random
5   Temperature=random.randint(1,100)
6   Humidity=random.randint(1,100)
7   print("Temperature:")
8   print(Temperature)
9   print("Humidity:")
10  print(Humidity)
11  if((Temperature>40)&(Humidity>65)):
12   print("Values are HIGH!!! ")
13   print("ALERT")
14  if((Temperature>40)&(Humidity<65)):
15   print("Tempertaure Value is HIGH!!! ")
16   print("Check Temperature")
17  if((Temperature<40)&(Humidity>65)):
18   print("Humidity Value is HIGH!!! ")
19   print("Check Humidity")
20  if((Temperature<40)&(Humidity<65)):
21   print("All Values are in limit!!! ")
22   print("SAFE ZONE")
```

```
Temperature:
13
Humidity:
94
Humidity Value is HIGH!!!
Check Humidity
```

```
1   '''
2   Let us consider normal temperature=40 Celsius and normal humidity=65%
3   '''
4   import random
5   Temperature=random.randint(1,100)
6   Humidity=random.randint(1,100)
7   print("Temperature:")
8   print(Temperature)
9   print("Humidity:")
10  print(Humidity)
11  if((Temperature>40)&(Humidity>65)):
12   print("Values are HIGH!!! ")
13   print("ALERT")
14  if((Temperature>40)&(Humidity<65)):
15   print("Tempertaure Value is HIGH!!! ")
16   print("Check Temperature")
17  if((Temperature<40)&(Humidity>65)):
18   print("Humidity Value is HIGH!!! ")
19   print("Check Humidity")
20  if((Temperature<40)&(Humidity<65)):
21   print("All Values are in limit!!! ")
22   print("SAFE ZONE")
```

```
Temperature:
79
Humidity:
69
Values are HIGH!!!
ALERT
```

```
1   '''
2   Let us consider normal temperature=40 Celsius and normal humidity=65%
3   '''
4   import random
5   Temperature=random.randint(1,100)
6   Humidity=random.randint(1,100)
7   print("Temperature:")
8   print(Temperature)
9   print("Humidity:")
10  print(Humidity)
11  if((Temperature>40)&(Humidity>65)):
12   print("Values are HIGH!!! ")
13   print("ALERT")
14  if((Temperature>40)&(Humidity<65)):
15   print("Tempertaure Value is HIGH!!! ")
16   print("Check Temperature")
17  if((Temperature<40)&(Humidity>65)):
18   print("Humidity Value is HIGH!!! ")
19   print("Check Humidity")
20  if((Temperature<40)&(Humidity<65)):
21   print("All Values are in limit!!! ")
22   print("SAFE ZONE")
```

```
Temperature:
88
Humidity:
31
Tempertaure Value is HIGH!!!
Check Temperature
```

```python
'''
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")
```

```
Temperature:
25
Humidity:
54
All Values are in limit!!!
SAFE ZONE
```