

Assignment -2

Python Programming

Question-1:

Build a python code ,assume you get temperature and humidity values (generated from random function to a variable)and write a condition to continuously detect alarm in case of high temperature.

Solution:

```
import random
temperature=random.randint(32,212)
humidity=random.randint(1,100)
if (temperature>99 and humidity>50):
    {
        print("Very high temperature(%d F) and very high humidity(%d) : Alarm is ON" %(temperature,humidity))
    }
elif(temperature<97 and humidity<30):
    {
        print("Ideal temperature(%d F) and humidity(%d) : Alarm is OFF" %(temperature,humidity))
    }
else:
    {
        print("Very low temperature(%d F) and very low humidity(%d) : Alarm is ON" %(temperature,humidity))
    }
```

```
1 import random
2 temperature=random.randint(32,212)
3 humidity=random.randint(1,100)
4 if (temperature>99 and humidity>50):
5     {
6         print("Very high temperature(%d F) and very high humidity(%d) :
7             Alarm is ON" %(temperature,humidity))
8     }
9 elif(temperature<97 and humidity<30):
10     {
11         print("Ideal temperature(%d F) and humidity(%d) : Alarm is OFF" %
12             (temperature,humidity))
13     }
14 else:
15     {
16         print("Very low temperature(%d F) and very low humidity(%d) :
17             Alarm is ON" %(temperature,humidity))
18     }
```

Very high temperature(156 F) and very high humidity(88) : Alarm is ON

```

1 import random
2 temperature=random.randint(32,212)
3 humidity=random.randint(1,100)
4 if (temperature>99 and humidity>50):
5     {
6         print("Very high temperature(%d F) and very high humidity(%d) :
          Alarm is ON" %(temperature,humidity))
7     }
8 elif(temperature<97 and humidity<30):
9     {
10        print("Ideal temperature(%d F) and humidity(%d) : Alarm is OFF" %
          (temperature,humidity))
11    }
12 else:
13    {
14        print("Very low temperature(%d F) and very low humidity(%d) :
          Alarm is ON" %(temperature,humidity))
15    }
16 }

```

Ideal temperature(66 F) and humidity(22) : Alarm is OFF

```

1 import random
2 temperature=random.randint(32,212)
3 humidity=random.randint(1,100)
4 if (temperature>99 and humidity>50):
5     {
6         print("Very high temperature(%d F) and very high humidity(%d) :
          Alarm is ON" %(temperature,humidity))
7     }
8 elif(temperature<97 and humidity<30):
9     {
10        print("Ideal temperature(%d F) and humidity(%d) : Alarm is OFF" %
          (temperature,humidity))
11    }
12 else:
13    {
14        print("Very low temperature(%d F) and very low humidity(%d) :
          Alarm is ON" %(temperature,humidity))
15    }
16 }

```

Very low temperature(33 F) and very low humidity(85) : Alarm is ON