

**Assignment -2**  
Python Programming

Assignment Date	21 September 2022
Student Name	Ajin R
Student Roll Number	962319104009
Maximum Marks	2 Marks

**Question-1:**

Build a python code, Assume u get temperature and humidity values

(generated with random function to a variable) and write a condition to continuously detect alarm in case of high temperature.

**Program :**

```
import random
```

```
from time import sleep
```

```
temp = 0.0
```

```
hum = 0.0
```

```
while(True):
```

```
    #here the temperature is considered in celsius
```

```
    temp = random.random()*100
```

```
    #humidity is considered in percentage , the amount of water contained in per cubic meter of air
```

```
    hum = random.random()*100
```

```
    if(temp > 40 and hum < 30 ):
```

```
        print()
```

```
        print("ALERT 🚨 Temperature is high")
```

```
        print("Temperature : {:.2f} ".format(temp))
```

```
        print("Humidity : {:.2f} ".format(hum))
```

```
        print()
```

```

elif(temp < 20 and hum > 50):
    print()

    print("ALERT ❄️ Temperature is low")
    print("Temperature : {:.2f} ".format(temp))
    print("Humidity : {:.2f} ".format(hum))
    print()

elif((temp >40 and temp >20) and (hum <50 and hum > 30)):
    print()

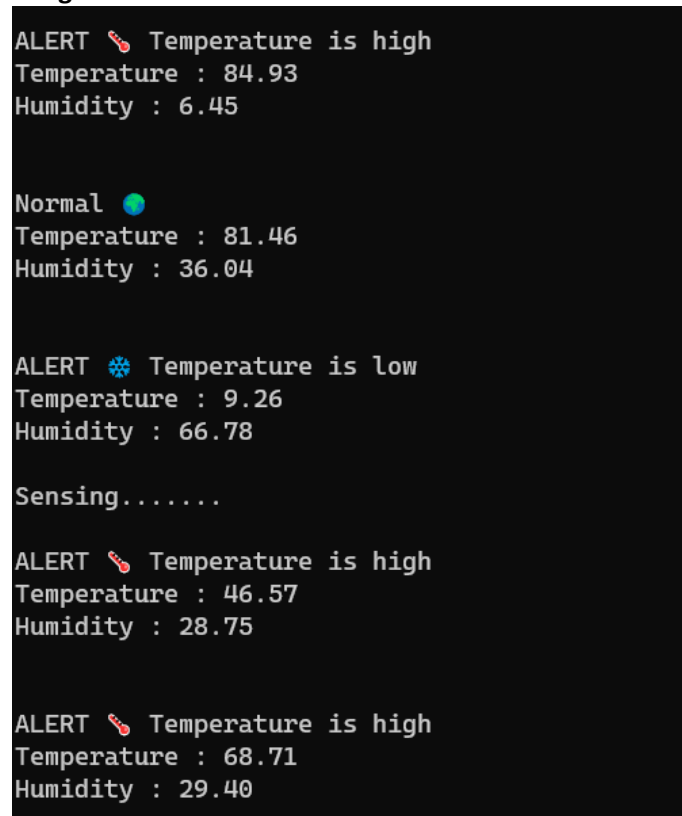
    print("Normal 🌍 ")
    print("Temperature : {:.2f} ".format(temp))
    print("Humidity : {:.2f} ".format(hum))
    print()

else:

    print("Sensing.....")
    sleep(1)

```

**Image :**



```

ALERT 🔥 Temperature is high
Temperature : 84.93
Humidity : 6.45

Normal 🌍
Temperature : 81.46
Humidity : 36.04

ALERT ❄️ Temperature is low
Temperature : 9.26
Humidity : 66.78

Sensing.....

ALERT 🔥 Temperature is high
Temperature : 46.57
Humidity : 28.75

ALERT 🔥 Temperature is high
Temperature : 68.71
Humidity : 29.40

```