

ASSIGNMENT - 2

PYTHON PROGRAMMING

PROBLEM STATEMENT:

To build a python code and assume that we get temperature and humidity values and continuously detect alarm in case of high temperature.

CODE:

Getting the temperature and humidity as random values and checking both the values if the values move above the threshold value, then an alert will be given.

```
import random
from time import sleep

def generate_values():
    temperature = random.randint(10, 50)
    humidity = random.randint(10, temperature)
    return humidity, temperature

humidity = temperature = 0

while temperature < 45 and humidity<20:
    humidity, temperature = generate_values()
    print('Humidity:', humidity, 'Temperature:', temperature)
    sleep(0.50)

print('High Temperature and Humidity is Detected')
```

```
import random
from time import sleep

def generate_values():
    temperature = random.randint(10, 50)
    humidity = random.randint(10, temperature)
    return humidity, temperature

humidity = temperature = 0

while temperature < 45 and humidity<20:
    humidity, temperature = generate_values()
    print('Humidity:', humidity, 'Temperature:', temperature)
    sleep(0.50)

print('High Temperature and Humidity is Detected')
```

OUTPUT:

```
☞ Humidity: 14 Temperature: 19  
Humidity: 22 Temperature: 37  
High Temperature and Humidity is Detected
```

```
☞ Humidity: 10 Temperature: 10  
Humidity: 19 Temperature: 24  
Humidity: 11 Temperature: 29  
Humidity: 20 Temperature: 20  
High Temperature and Humidity is Detected
```