

IBM – Nallaiya Thiran Project

Assignment 2 - High Temperature Detector

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Problem:

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

Source Code:

```
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
i=0
while i<=10:
    humidity, temperature = generate_values()
    print('Humidity:', humidity, 'Temperature:',
temperature)
    if temperature>=30:
        print('Alarm Activated : High Temperature
Detected\n')
        i=i+1
        sleep(0.10)
```

Output:

```
Humidity: 16 Temperature: 41
Alarm Activated : High Temperature Detected

Humidity: 26 Temperature: 29
Humidity: 13 Temperature: 37
Alarm Activated : High Temperature Detected

Humidity: 19 Temperature: 33
Alarm Activated : High Temperature Detected

Humidity: 12 Temperature: 13
Humidity: 11 Temperature: 21
Humidity: 22 Temperature: 41
Alarm Activated : High Temperature Detected

Humidity: 19 Temperature: 22
Humidity: 25 Temperature: 35
Alarm Activated : High Temperature Detected

Humidity: 28 Temperature: 29
Humidity: 25 Temperature: 26
```