

Assignment -2

High Temperature Detector

Assignment Date	27 September 2022
Student Name	Mr. Premal Raj Vellaisamy
Student Roll Number	2019503032
Maximum Marks	2 Marks

Question-1:

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

Solution:

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
```