Assignment -2

High Temperature Detector

Assignment Date	27 September 2022
Student Name	Mr. Sham Ganesh
Student Roll Number	2019503559
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: 19 Temperature: 25
Alarm Activated: High Temperature Detected

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