Assignment -2
Python Programming

Assignment Date	25 September 2022
Student Name	Gayathri S
Student Roll Number	923819106017
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.

Solution:

```python
import random

import time

while True:

    Temperature = random.randint(0,150)

    Humidity = random.randint(0,100)

    if Temperature > 100 and Humidity > 80:

        print("Temperature : " + str(Temperature))

        print("Humidity : " + str(Humidity))

        print("Temperature and Humidity is High")

        print("Alarm On !!!")

        print("")

        time.sleep(2)

    else:

        print("Temperature : " + str(Temperature))

        print("Humidity : " + str(Humidity))

        print("Range is Normal")

        print("")
```

temperature.py - C:/Users/WELCOME/Documents/python program/temperature.py (3.10.7)

File   Edit   Format   Run   Options   Window   Help

```python
import random
import time
while True:
    Temperature = random.randint(0,150)
    Humidity = random.randint(0,100)
    if Temperature > 100 and Humidity > 80:
        print("Temperature : " + str(Temperature))
        print("Humidity : " + str(Humidity))
        print("Temperature and Humidity is High")
        print("Alarm On !!!")
        print("")
        time.sleep(2)
    else:
        print("Temperature : " + str(Temperature))
        print("Humidity : " + str(Humidity))
        print("Range is Normal")
        print("")
```

IDLE Shell 3.10.7

File   Edit   Shell   Debug   Options   Window   Help

```
Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep  5 2022, 14:08:36) [MSC v.1933 64 bi
t (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
================================================ RESTART: C:/Users/WELCOME/Do
cuments/python program/temperature.py ========================================
=========
Temperature : 132
Humidity : 83
Temperature and Humidity is High
Alarm On !!!

Temperature : 128
Humidity : 91
Temperature and Humidity is High
Alarm On !!!

Temperature : 139
Humidity : 80
Range is Normal

Temperature : 79
Humidity : 61
Range is Normal

Temperature : 73
Humidity : 22
Range is Normal

Temperature : 49
Humidity : 26
Range is Normal

Temperature : 97
Humidity : 31
Range is Normal

Temperature : 94
Humidity : 47
Range is Normal
```