Assignment -2
Python Programming

Assignment Date	01 0ctober 2022
Student Name	Ms.Swetha S
Student Roll Number	718018L155
Maximum Marks	2 Marks

Question-1:

Write a program(assume you need to 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:

```
import random
#randint returns a integer number between -40 and 120(both start and end values are included)
def Humidityvalue():
Humidity = random.randint(0, 100)
return Humidity
def Temperature():
Temp = random.randint(-40, 125)
return Temp
Humidity = Humidityvalue()
Temp = Temperature()
print("Humidity value: ", Humidity)
print("Temperature value: ",Temp)
#checking the climate condition based on temperature values
if Temp >= -40 and Temp <= 0:
print("chill")
elif Temp >= 0 and Temp <= 40:
print("temperature is normal and moderate level")
else:
print("high temperature make a alarm")
```

The above code is an example for DHT22 - Temperature and Humidity Sensor
The Sensor's temperature range =-40 to +125C and humidity range =0 to 100%

main.py

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```

Console / Shell

```
Humidity value:  80
Temperature value:  -26
chill
```

main.py

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```

Console / Shell

```
Humidity value:  59
Temperature value:  39
temperature is normal and moderate level
```

main.py

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```

Console / Shell

```
Humidity value:  62
Temperature value:  107
high temperature make a alarm
```