Assignment -1

Python assignment

Assignment Date	21 September 2022
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Maximum Marks	2 Marks

Question-1:

Build a Python code, assume you 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 as rand
print("Welcome to Temperature and Humidity Monitoring Device")
temp = int(rand.randint(-40,125))
humid = int(rand.randint(0,100))
if((temp \ge -40) and (temp < --1)):
  print(f"Temperature: {temp} *C")
  print("Low Temperature, Freezing!")
  print(f"Humidity: {humid}%")
elif((temp >= 1) and (temp <= 20)):
  print(f"Temperature: {temp} *C")
  print("Cold Breeze")
  print(f"Humidity: {humid}%")
elif((temp >= 21) and (temp <= 29)):
  print(f"Temperature: {temp} *C")
  print("Room Temperature")
  print(f"Humidity: {humid}%")
elif((temp >= 30) and (temp <= 54)):
  print(f"Temperature: {temp} *C")
  print("Teamperature is high!\nPlease turn on the Air Conditioner to avoid heatstroke")
  print(f"Humidity: {humid}%")
else:
```

```
print(f"Temperature: {temp} *C")
print("Warning! Temperature is very High!\nPlease leave the area immediately")
print(f"Humidity: {humid}%")
```

Output:

Welcome to Temperature and Humidity Monitoring Device

Temperature: 26 *C Room Temperature Humidity: 53%

Welcome to Temperature and Humidity Monitoring Device

Temperature: 102 *C

Warning! Temperature is very High! Please leave the area immediately

Humidity: 71%