Assignment -2

High Temperature Detection Alarm

Assignment Date	17 September 2022
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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.

print("High Temperature Alert : "+str(temperature)+"°F")

time.sleep(10)

Solution:

```
# import the random and time library in python script.
import random
import time

# iterate the random values of Temperature and humidity within the specified range.
while True:
    temperature = random.randint(32, 212)
    humidity = random.randint(0, 100)
    #printing the values of Temperature and humidity.
    print("Temperature is : "+str(temperature)+"°F")
    print("Temperature in celsius : "+str(((temperature-32)*5)//9)+"°C")
    print("The Humidity is : "+str(humidity)+"%")
# check if the temperature values are higher than 100°F.
    if (temperature >= 100):
```

Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug 1 2022, 21:53:49) [MSC v.1932 64 bit (AMD64)] on win32 Type "help", "copyright", "credits" or "license()" for more information.

Temperature is : 145°F

Temperature in celsius : 62°C

The Humidity is : 1%

High Temperature Alert: 145°F

Temperature is : 96°F

Temperature in celsius : 35℃

The Humidity is : 40% Temperature is : 212°F

Temperature in celsius : 100°C

The Humidity is: 71%

High Temperature Alert: 212°F

Temperature is: 148°F

Temperature in celsius : 64°C

The Humidity is : 13%

High Temperature Alert: 148°F

Temperature is: 186°F

Temperature in celsius : 85℃

The Humidity is : 19%

High Temperature Alert: 186°F