

Assignment -2
High Temperature Detection Alarm

Assignment Date	17 September 2022
Student Name	Mr. Jonnalagadda Shanmukha Srinivas
Student Roll Number	111519104055
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:

```
# 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):
        print("High Temperature Alert : "+str(temperature)+"°F")
    time.sleep(10)
```

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.

===== RESTART: C:/Users/MPK/assessment 2.py =====

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°C
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°C
The Humidity is : 19%
High Temperature Alert : 186°F