

Assignment -2

Python Programming

Divyanand MH

611219106019

Question:

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 random
while(True):
    t=random.randint(10,99)
    h=random.randint(10,99)
    if(t>30 and h<40):
        print("High temprature and values of Temperature & Humidity is:",t,h,"Alarm is on")
    elif(t<30 and h>40):
        print("Low temprature and values of Temperature & Humidity : ",t,h,"Alarm is off")
```



The screenshot shows a Python IDE with a menu bar (File, Edit, Format, Run, Options, Window, Help) and a toolbar. The code editor contains the same Python code as shown in the solution. Below the code editor, the output window displays the results of running the program. It starts with a restart message and then shows a series of 40 lines of output, each representing a random temperature and humidity value and the corresponding alarm status (on or off).

```
File Edit Format Run Options Window Help

import random
while(True):
    t=random.randint(10,99)
    h=random.randint(10,99)
    if(t>30 and h<40):
        print("High temprature and values of Temperature & Humidity is:",t,h,"Alarm is on")
    elif(t<30 and h>40):
        print("Low temprature and values of Temperature & Humidity : ",t,h,"Alarm is off")

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/HP/Desktop/Assignment 2 code.py =====
Low temprature and values of Temperature & Humidity: 17 94 Alarm is off
High temprature and values of Temperature & Humidity is: 83 30 Alarm is on
High temprature and values of Temperature & Humidity is: 87 33 Alarm is on
High temprature and values of Temperature & Humidity is: 93 35 Alarm is on
High temprature and values of Temperature & Humidity is: 33 39 Alarm is on
High temprature and values of Temperature & Humidity is: 99 23 Alarm is on
Low temprature and values of Temperature & Humidity: 25 88 Alarm is off
High temprature and values of Temperature & Humidity is: 37 27 Alarm is on
High temprature and values of Temperature & Humidity is: 42 28 Alarm is on
High temprature and values of Temperature & Humidity is: 40 25 Alarm is on
Low temprature and values of Temperature & Humidity: 29 85 Alarm is off
High temprature and values of Temperature & Humidity is: 31 33 Alarm is on
Low temprature and values of Temperature & Humidity: 26 69 Alarm is off
Low temprature and values of Temperature & Humidity: 11 99 Alarm is off
High temprature and values of Temperature & Humidity is: 83 14 Alarm is on
High temprature and values of Temperature & Humidity is: 45 37 Alarm is on
High temprature and values of Temperature & Humidity is: 63 28 Alarm is on
Low temprature and values of Temperature & Humidity: 13 45 Alarm is off
Low temprature and values of Temperature & Humidity: 28 88 Alarm is off
High temprature and values of Temperature & Humidity is: 46 15 Alarm is on
High temprature and values of Temperature & Humidity is: 85 33 Alarm is on
Low temprature and values of Temperature & Humidity: 12 66 Alarm is off
High temprature and values of Temperature & Humidity is: 51 25 Alarm is on
High temprature and values of Temperature & Humidity is: 45 18 Alarm is on
High temprature and values of Temperature & Humidity is: 50 35 Alarm is on
High temprature and values of Temperature & Humidity is: 45 31 Alarm is on
High temprature and values of Temperature & Humidity is: 89 16 Alarm is on
High temprature and values of Temperature & Humidity is: 68 21 Alarm is on
Low temprature and values of Temperature & Humidity: 23 41 Alarm is off
Low temprature and values of Temperature & Humidity: 29 80 Alarm is off
High temprature and values of Temperature & Humidity is: 72 39 Alarm is on
High temprature and values of Temperature & Humidity is: 74 10 Alarm is on
Low temprature and values of Temperature & Humidity: 25 66 Alarm is off
High temprature and values of Temperature & Humidity is: 48 26 Alarm is on
Low temprature and values of Temperature & Humidity: 21 83 Alarm is off
High temprature and values of Temperature & Humidity is: 90 27 Alarm is on
High temprature and values of Temperature & Humidity is: 56 12 Alarm is on
High temprature and values of Temperature & Humidity is: 64 12 Alarm is on
Low temprature and values of Temperature & Humidity: 19 53 Alarm is off
High temprature and values of Temperature & Humidity is: 63 39 Alarm is on
High temprature and values of Temperature & Humidity is: 92 22 Alarm is on
High temprature and values of Temperature & Humidity is: 67 18 Alarm is on
High temprature and values of Temperature & Humidity is: 34 18 Alarm is on
```