

PANIMALAR ENGINEERING COLLEGE

Department of Electronics and Communication Engineering IOT Assignment

Assignment -2

Python Programming

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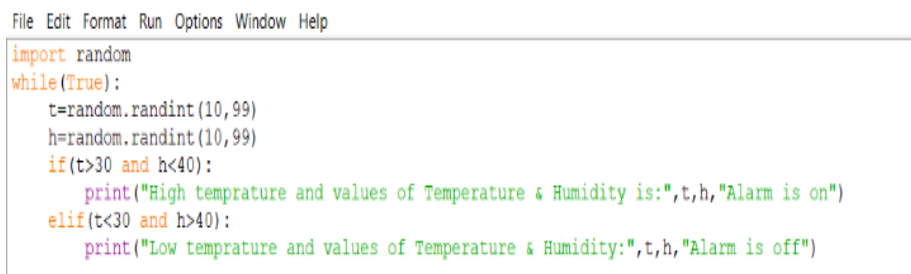
Team ID: PNT2022TMID01176

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.

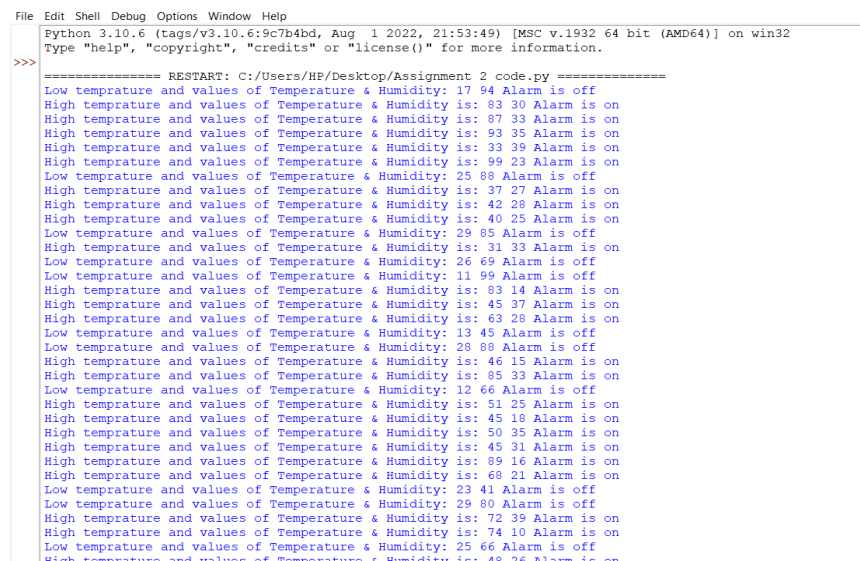
Solution:

```
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 code editor window with a menu bar (File, Edit, Format, Run, Options, Window, Help) and a toolbar. The code is as follows:

```
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 terminal window with a menu bar (File, Edit, Shell, Debug, Options, Window, Help) and a toolbar. The output of the code is as follows:

```
>>>
===== 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
```