

Assignment 2:

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

CODE

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#<p># Distributed with a free-will license.<br># Use it any way you want, profit or
free, provided it fits in the licenses of its associated works.
# SHT25
# This code is designed to work with the SHT25_I2CS I2C Mini Module available from Co
ntrolEverything.com.
# https://www.controleverything.com/content/Humidity?sku=SHT25_I2CS#tabs-0-product_ta
bset-2</p><p>import smbus
import time</p><p># Get I2C bus
bus = smbus.SMBus(1)</p><p># SHT25 address, 0x40(64)
# Send temperature measurement command
#
          0xF3(243)          NO HOLD master
bus.write_byte(0x40, 0xF3)</p><p>time.sleep(0.5)</p><p># SHT25 address, 0x40(64)
# Read data back, 2 bytes
# Temp MSB, Temp LSB
data0 = bus.read_byte(0x40)
data1 = bus.read_byte(0x40)</p><p># Convert the data
temp = data0 * 256 + data1
cTemp= -46.85 + ((temp * 175.72) / 65536.0)
fTemp = cTemp * 1.8 + 32</p><p># SHT25 address, 0x40(64)
# Send humidity measurement command
#
          0xF5(245)          NO HOLD master
bus.write_byte(0x40, 0xF5)</p><p>time.sleep(0.5)</p><p># SHT25 address, 0x40(64)
# Read data back, 2 bytes
# Humidity MSB, Humidity LSB
data0 = bus.read_byte(0x40)
data1 = bus.read_byte(0x40)</p><p># Convert the data
humidity = data0 * 256 + data1
humidity = -6 + ((humidity * 125.0) / 65536.0)</p><p># Output data to screen
print "Relative Humidity is : %.2f %" %humidity
print "Temperature in Celsius is : %.2f C" %cTemp
print "Temperature in Fahrenheit is : %.2f F" %fTemp</p>

```