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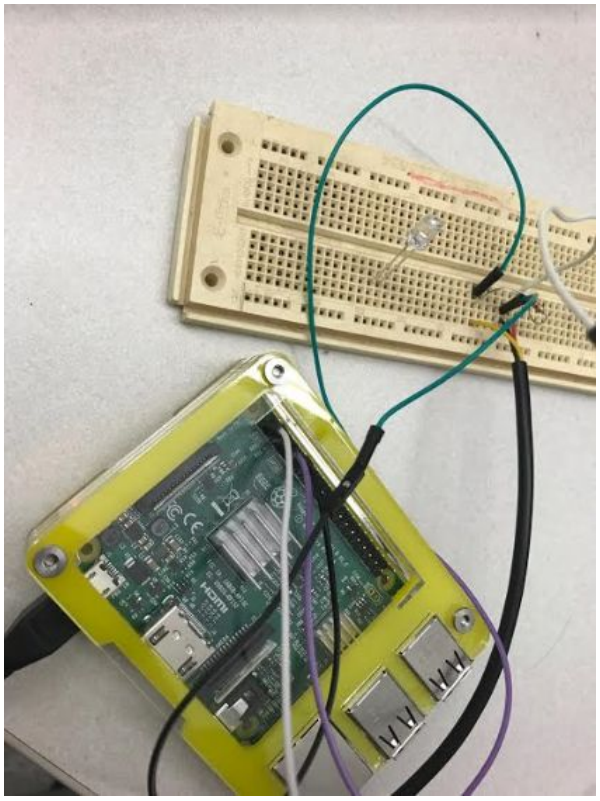
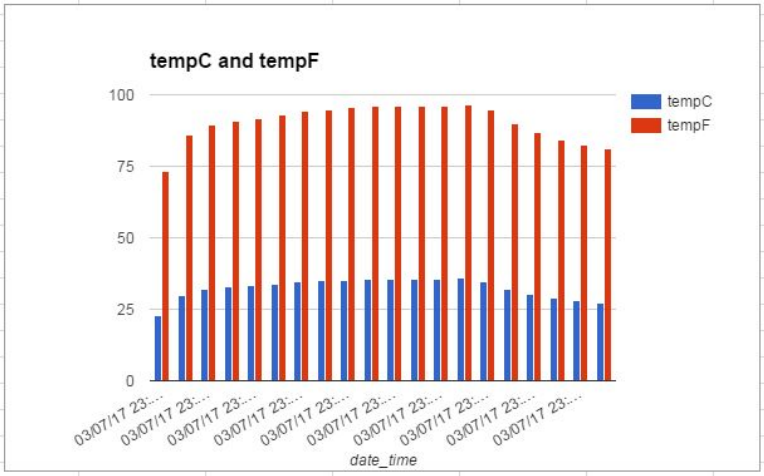
Assignment 3 part 3



date_time	tempC	tempF
03/07/17 23:40:3	22.875	73.175
03/07/17 23:41:0	30	86
03/07/17 23:41:3	31.812	89.2616
03/07/17 23:42:0	32.687	90.8366
03/07/17 23:42:3	33.25	91.85
03/07/17 23:43:0	33.937	93.0866
03/07/17 23:43:3	34.5	94.1
03/07/17 23:44:0	34.937	94.8866
03/07/17 23:44:3	35.25	95.45
03/07/17 23:45:0	35.5	95.9
03/07/17 23:45:3	35.625	96.125
03/07/17 23:46:0	35.625	96.125
03/07/17 23:46:4	35.687	96.2366
03/07/17 23:47:1	35.75	96.35
03/07/17 23:47:4	34.812	94.6616
03/07/17 23:48:1	32.062	89.7116
03/07/17 23:48:4	30.437	86.7866
03/07/17 23:49:1	29.125	84.425
03/07/17 23:49:4	28.062	82.5116
03/07/17 23:50:1	27.25	81.05



```
#!/usr/bin/python
import os
import time
import sqlite3 as mydb
import sys

""" Log Current Time, Temperature in Celsius and Fahrenheit
 To an Sqlite3 database """

def readTemp():
        tempfile = open("/sys/bus/w1/devices/28-0516921f23ff/w1_slave")
        tempfile_text = tempfile.read()
        currentTime=time.strftime('%x %X %Z')
        tempfile.close()
        tempC=float(tempfile_text.split("\n")[1].split("t=")[1])/1000
        tempF=tempC*9.0/5.0+32.0
        return [currentTime, tempC, tempF]

# In this section of the code, I placed a for loop so that the commands given
# will allow the loop to recycle itself 20 times every 30 seconds. This makes
# the loop execute for 10 total minutes while collecting the tempertaute
# data every 30 seconds.

def logTemp():
        con = mydb.connect('/home/pi/Tests/temperature.db')
        with con:
         for i in range(0,20):
                try:
                        [t,C,F]=readTemp()
                        print "Current temperature is: %s F" %F
                        cur = con.cursor()
                        #sql = "insert into TempData values(?,?,?)"
                        cur.execute('insert into TempData values(?,?,?)', (t,C,F))
                        print "Temperature logged"
                except:
                        print "Error!!"
                time.sleep(30)

logTemp()
```