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Embedded Linux
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```python

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

""" Log Current Time, Temperature in Celsius and Fahrenheit
Returns a list [time, tempC, tempF] """

sumOfSeconds = 0

def readTemp():
        tempfile = open("/sys/bus/w1/devices/28-051686f4d2ff/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]

def logTemp():
        con = mydb.connect('temperature.db')
        [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))
        con.commit()
        print "Temperature logged"
    global sumOfSeconds

    time.sleep(30)
    sumOfSeconds = sumOfSeconds + 30

    if sumOfSeconds != 600:
        logTemp()

logTemp()
```

Figure 1: Python code

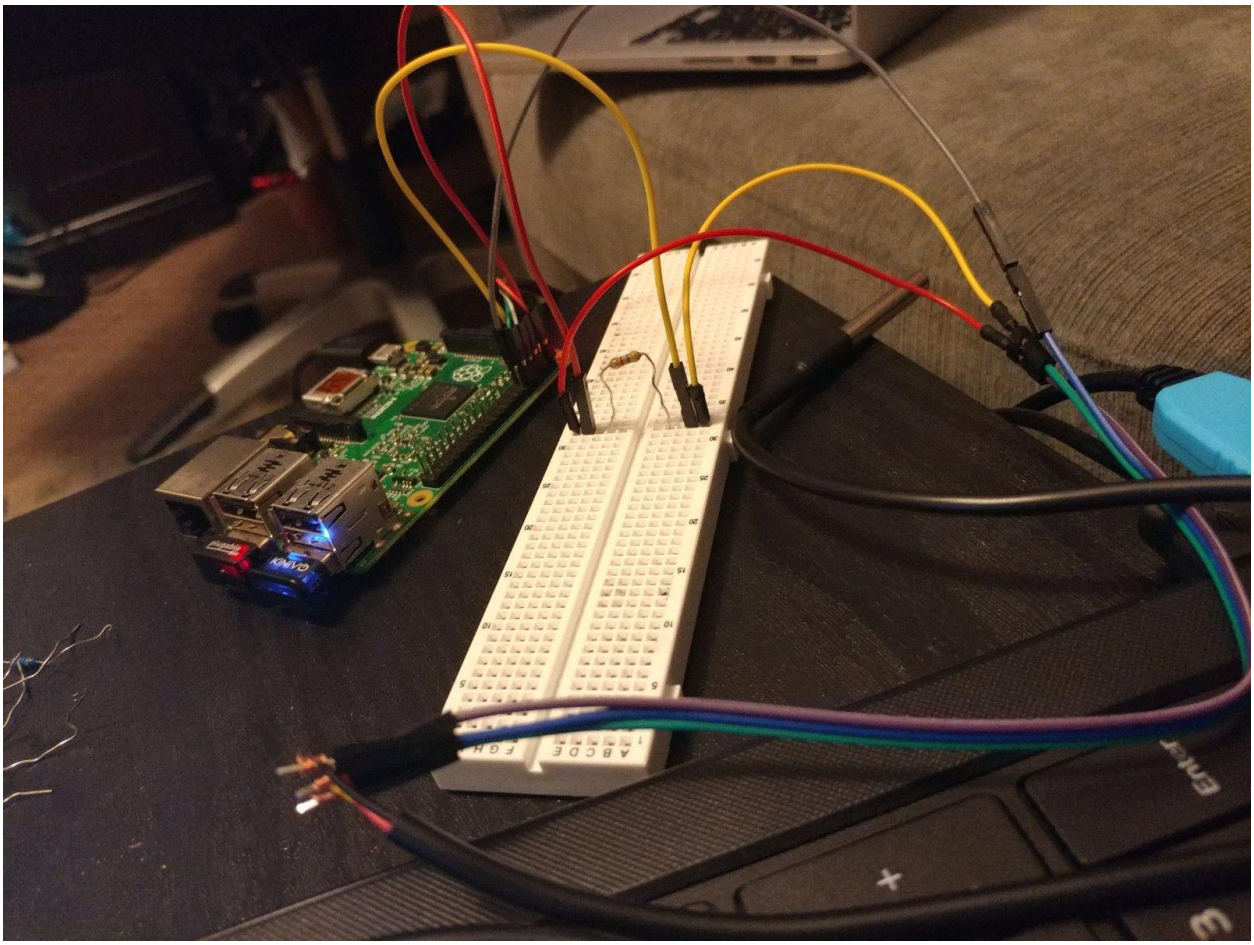

Figure 2: Set up

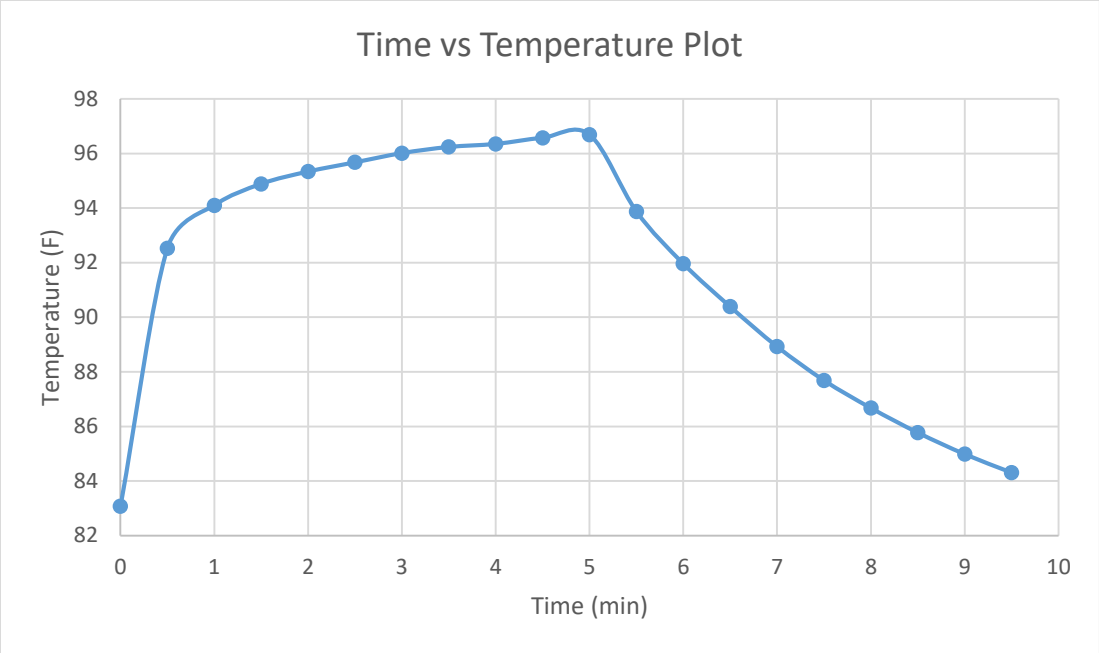

Figure 3: Graph outcome