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Embedded Linux

Assignment 3 Temp Sensor

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

def readTemp():
    tempfile = open("/sys/bus/w1/devices/28-000006979949/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('/home/pi/Databases/temp.db')
    with con:
        try:
            [t,C,F] = readTemp()
            print "Current temperature is: %s F" %F
            cur = con.cursor()
            cur.execute('insert into TempData values(?,?,?)',(t,C,F))
            print "Temperature logged"
        except:
            print "Error"

def tempTimer():
    x = 0.0
    while True:
        print x
        if x == 10.0:
            break
        time.sleep(30)
        logTemp()
        x += 0.5

#print readTemp()
#logTemp()
tempTimer()
```

Temp in F