```
This file has values separated by tabs.
        "When opening with a spreadsheet program, specify that tabs are delimiters."
        "When saving (e.g. with Excel), save as ""Text (Tab delimited) (*.txt)"" "
        Response (may use cells in adjacent columns if needed)
#
        wuf4@ncsu.edu
1
2
        22108 or 22084
3
        11144
4
        6176
5
        348
6
        17072 or 17056
7
        1260 or 1262
8
        _printf_core : 768 bytes
9
        os mem : 4096
10
        Control HBLED : 560 or 566
11
        Lucida Console12x19 : 3831
12
        st7789.0 : 1900
13
        lucida 12x19.o : 3831
14
        rtx lib.o : 4940
15
        Control.o: 3968
16
        rtx thread.o : 2038 or 2044
17
        rtx kernel.o : 11
18
        rtx kernel.o: 164
19
        os systick: 1
20
        _printf_core : 768, Control_HBLED : 560, svcRTxThreadnew : 484 or 492
21
        ves
22
        [Unclear if there is a way to do this, so look for any solutions offered].
23
        Lucida Console12x19 : 3831, g meas sample : 1920, g set sample : 1920
24
25
26
        0x00002500 4904 LDR r1,[pc,#16] or 0x000024F4 4904 LDR r1,[pc,#16]
27
        No, it needs to be on a 2 byte boundary
28
        0x00002512 4770 BX lr or 0x00002506 4770 BX lr
        It is defining the lower half-word of the constant 10000 (0x00002710)
29
30
        It is defining the upper half-word of the constant 10000 (0x00002710)
31
        multiplies the t variable by 10000
32
        r0
        it is a word at address 0x00002514 (or 0x00002508). This value is loaded by
33
the ldr at 0x00002500 (or 0x000024f4) into register r1. MULS multiplies r1 and r0.
        Stores the t variable to memory. The volatile keyword makes it write to
34
memory always.
        0x00002500,0x00002504,no
                                        0x00002506,0x0000250A,yes-branch
0x0000250C,0x0000250E,yes-branch
                                        0x00002510,0x00002512,yes-return
35
        0x000024f4,0x000024f8,no
                                        0x000024fa,0x000024fe,yes-branch
0x00002500,0x00002502,yes-branch
                                        0x00002504,0x00002506,yes-return
        No. Threre is a lot of conditional control flow in the CFG, but not in the
source code.
39
        No
40
        No
        Test_Fault get inlined into Thread_Fault_Injector, and the original
Test Fault function code is removed by the linker.
```

```
42
        ADD pc,pc,r0
43
        r0, Arm parameter passing convention
45
        Each entry is one byte. There are 14 entries, arg contains the test number,
ie the location in the table. LDRB loads the jump offset (in half-words) from the
table. The jump offset is doubled (to get bytes) and is then added to the pc
register. This will cause the pc the jump to the case's code.
        112 bytes, the table is 14 bytes, so there is more then enough space.
46
        In some TR Fill Queue, there is no exit, so there is an infinte loop. So
there would be no need to have a jmp to the merge point in the switch statement.
        no and yes, two of the case are the same. so the compiler would have merged
51
these to into one.
        The linker listing says that no function calls main
52
        osKernelStart, osKernelInitialize, Sound_Disable_Amp, LCD_Text_PrintStr RC,
53.a
LCD_Text_Init, LCD_Init, LCD_Erase, Fault_Init, Create_OS_Objects, Init_RGB_LEDs,
Control_RGB_LEDs, Delay, Init_Debug_Signals, Init_Buck_HBLED
        UI Process Touch, LCD TS Read, osDelay
53.b
55.a
        108
55.b
        44
        132
55.c
55.d
        120 or 104
55.e
        200
55.f
56.a
        ADC0 IRQHandler, 176
        DMA0_IRQHandler, 64
56.b
        PIT IROHandler, 8
56.c
56.d
        PendSV Handler, 56
56.e
        SysTick_Handler, 80
56.f
        TPM0_IRQHandler, 4
        __aeabi_fsub, __aeabi_frsub, Control_HBLED
57
58
        Control_HBLED, ADCO_IRQHandler
        _float_epilogue, _float_round
59
61
62
        yes
64
        The compiler turns the recursion into a loop. So loop iterations do not use
additional stack space.
        No. Instead it is adding two. It is not clear why. However, the return value
65
may not matter, since the function never returns.
        Example differences: No variable declarations. Some symbols (e.g. variable
67
names, macros) are missing in decompiled version. Decompiled version uses variable
names which describe memory locations instead. If/else case layout flipped. No
```

preprocessor directives. Conditionally compiled code which wasn't compiled isn't

included (#if USE_SYNC_NO_FREQ_DIV).