Project03 updates
Lab06
sum_array_sec
strcat
substr

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labels

foo: ← entry point for a function

loop: ← if/then/else for/while

bar:

*loop!

foo_loop:

bar_loop:

ldr , str   base register
                             base address

ldr r0, [r1]   addr = r1
ldr r0 , [r1, #4]   addr = r1 + 4
ldr r0 , [r1, r2]   addr = r1 + r2
ldr r0, [r1, r2, LSL #2]
                        addr = r1 + (r2 * 4)
                                  ↑
lsl r0, r1, #2   array + (i * 4)
    r0 = r1 << 2   mult by 4

lsr r0, r1, #2
    r0 = r1 >> 2   div by 4

Preserve registers
foo: ↓ multiple of 8   ↓ space
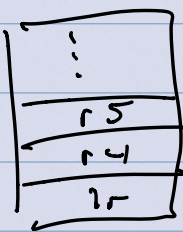
    sub sp, sp, #16   ⟋ sp → | : |
    str lr, [sp]   ↖ |───────|
    str r4, [sp, #4] | r5 |
    str r5, [sp, #8]   sp-16 ↙ | r4 |
        : | lr |
   ⟋   :   ↖ preserve
        :   callee saved
                                      registers
    ldr r5, [sp, #8]
    ldr r4, [sp, #4]   also may need
    ldr lr, [sp]   to preserve caller
    add sp, sp, #16   saved registers
    bx lr