

Problem 1: The assembly language program below is written using DLX-like mnemonics, but for a richer ISA. Re-write the program in DLX. Be sure to consider immediate sizes.

```
LW R1, (#0x123456)    ! Load R1 with contents of memory location 0x123456.
MOV R3, #0x1234       ! Load R3 with constant 0x1234.
LW R2, @(R3)          ! Memory indirect addressing, R2 = Mem[Mem[R3]]
SUB R4, R1, R2
BN Skip              ! Branch if last result negative.
LW R4, #0
Skip:
RET                  ! Return from subroutine.
```

Problem 2: Do problem 2.3 (page 12) in the book.