CSC 225
Homework #3

1. What is the advantage of assembly language over machine language?

2. What is the purpose of an OPCODE in an instruction? What is the purpose of an OPERAND in an instruction?

3. Book problem 7.2

4. Book problem 7.5

5. Book problem 7.6
   Please correct the problem to read as follows:
   Our assembler has crashed and we need your help! Create a symbol table for the program shown below, and assemble the instructions at labels A, B, and D.

   `.ORIG x3000
   AND R0, R0, #0
   A LD R1, E
   AND R2, R1, #1
   BRp C
   B ADD R1, R1, #-1
   C ADD R0, R0, R1
   ADD R1, R1, #-2
   D BRp C
   STR 0, F
   TRAP x25
   E .BLKW 1
   F .BLKW 1
   .END

6. Book problem 7.9

7. Book problem 7.10

8. Book problem 7.13


10. Book problem 7.15

11. Book problem 7.17

12. Book problem 7.20