1. Study Sections 4.1, 4.2.

2. Do Exercises 3.23, 3.26, 3.28, 3.33, 3.35, 3.37, 4.4.
   For 3.23: Don't forget to convert the shifted values back to decimal. With ASL, show the effect on the NZVC bits. With ASR show the effect on the NZC bits. (ASR does not affect the V bit.)

   For these exercises, type your solutions in a text editor and save it in a file named `a03written.pdf`. Note the lowercase `a`. You cannot simply change the extension of your file name from `.docx`, or `.rtf`, or `.txt` to `.pdf`. You must *export* your document as a PDF file.

   Hand in the file electronically per the instructions for your course. For example, if your two-digit number is 99 then for this assignment, which is assignment `a03`, you would name it `99a03written.pdf`.

3. Do Problem 3.61.
   Write your program in Java with IntelliJ by completing the code of `Prob0361Main.java`, which has the user interface already in place. Convert the eight characters in `line` to eight integers in the `binNum` array. Verify that each bit entered by the user is 0 or 1 and output an error message if it is not. If the user enters

   ```
   11111101
   ```

   the output to the console should be

   ```
   11111101 (bin) = -3 (dec)
   ```

   RESTRICTION: Do not use the Java function `parseInt()` because it does what your program is supposed to do.

   Name your Java package `prob0361`. Note the lowercase `p`. The first line of your source file must be `package prob0361;`. Name your IntelliJ project `Prob0361` and the class that has the main program as `Prob0361Main`. Note the uppercase `P`. For your convenience, here is an IntelliJ project set up according to the above specifications.

   https://cslab.pepperdine.edu/warford/cosc330/Prob0361.zip

   Export the source file in a JAR file named `Prob0361.jar`. For this problem and all future Java problems, be sure to include the `.java` source files in the `.jar` file as described in Assignment 2. Hand in `Prob0361.jar` electronically per the instructions for your course. For example, if your two-digit number is 99 then you would name it `99Prob0361.jar`.