1. Study Sections 3.3, 3.4, 3.6

2. Do Exercises 3.7, 3.12, 3.14, 3.16, 3.18, 3.19, 3.21

   Type your solutions in a text editor and save it in a PDF file named `a02written.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. If your two-digit number is 99 then for this assignment, which is assignment `a02`, you would name it `99a02written.pdf`.

3. Do Problem 3.57.
   Although the problem says to write your program in C, write it in Java with IntelliJ by completing the code in `Prob0357Main.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 `11111100` the output to the console should be

   ```
   11111101
   11111110
   11111111
   00000000
   00000001
   00000010
   00000011
   00000100
   00000101
   00000110
   ```

   Here is a link to Oracle's Java documentation for the `String` class. It lists the methods you can use for the `line` variable. See the `charAt()` method for extracting an individual character from `line`.

   Here is a link to documentation for the `PrintStream` class. You must use the formatting capabilities of the `System.out.printf()` method of this class even though it may no seem necessary. The `printf()` method will be necessary in later projects so you should start using it now. Also, you will be learning how `printf()` works in C because the `printf()` in Java has identical behavior.

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

   Name your Java package `prob0357`. Note the lowercase `p`. The first line of your source file must be `package prob0357;`. Name your IntelliJ project `Prob0357` and the class that has the main program as `Prob0357Main`. Note the uppercase `P`.

   For your convenience, here is a IntelliJ project set up according to the above specifications.

   `https://cslab.pepperdine.edu/warford/cosc330/Prob0357.zip`

   See this link for instructions on how to set up Java and complete the assignment.

   Hand in the `Prob0357.jar` file electronically per the instructions for your course. For example, if your two-digit number is 99 then you would name it `99Prob0357.jar`.