**Specification:** For this assignment you will produce a design outline for Programming Assignment 6 — the simple inventory program. Your outline must be typed as a plain text file. Use Notepad, or PFE, or even the Visual C++ editor; **do not use a word processor like MS Word**. Your design must satisfy the following requirements:

- Start with a brief header comment listing your name, section, and date completed. You do not have to describe the purpose of the program.
- You must include your planned `typedef` for the required `struct` variable. This should be listed right after the header comment.
- You must indicate when input data values are read and specify associated variable names.
- You must indicate when output values are written.
- You must indicate when files will be opened/closed and specify the file names.
- You must indicate what values are calculated, when they are calculated, and the names of the associated variables.
- You must indicate what comparisons or decisions are made (like "insurance plan is B"), but you do not have to indicate how that comparison or decision will be carried out.
- You must indicate when iteration is used, exactly which steps are within the loop, and exactly what condition(s) will cause the loop to terminate.
- Plan your design around user-defined functions, and be sure to explain what each function does. The function explanations should be clear and be given after the design outline for the main program — these explanations should include a header comment and a design outline for the function implementation.
- Use the pseudocode notation, for while loops and if...else statements, discussed in Appendix 3 to the course notes. Be careful to indicate clearly in your design where logical blocks, like the body of a loop, begin and end.

**Example:** Take a look at the posted example of a design outline for the arrays version of the payroll program. I've illustrated one fairly thorough approach there, and invented some additional notation that may be useful:

http://ei.cs.vt.edu/~cs1044/spring.99/mcquain/examples/ArrayPayOutline.txt

**Grades:** Your grade on this assignment will reflect both how well you've conformed to the requirements above and how complete your design is. We will make every attempt to return the grades to you a week before the project is due so you can take advantage of any feedback. **You should incorporate a revised design outline in the header comment for your project six submissions.**

**Submission Instructions:** You will submit your design electronically, using the Automated Acceptor (a cousin of the Automated Grader). The Acceptor Client software is available from the Automated Acceptor Home Page:

(http://ei.cs.vt.edu/~acceptor/Acceptor.html)

Read the Student Guide to the Acceptor, available at the URL above for installation and use instructions. You must submit your design by the due date/time given below. The Acceptor will be prepared to accept your submissions by April 16.

The Acceptor Server will send you an e-mail acknowledging receipt of your submission. Be sure to compare the size of your file to the size reported in that e-mail message (instructions are in the Student Guide to the Acceptor). If you don't receive the e-mail within a few minutes, you may want to resubmit your design. You will be allowed 5 submissions; the last one will be graded.