CSE 305 Programming Languages Spring, 2005
Homework 10
Maximum Points: 12
Due 9:00 am, Monday, April 25, 2005

Professor Shapiro

April 18, 2005

Write the answers to this homework set into a file named `hw10`, and submit it using the `submit` script, by the date and time shown above.

1. (6) Design a small Perl test program to see if our version of Perl uses in, out, or inout mode for passing parameters. Include in your submission: a) your program; b) a copy of your test compile-and-run; c) your conclusion.

2. (6) The text says, "In most Fortran implementations before Fortran 77, parameters were passed by reference. In later implementations, however, pass-by-value-result has been frequently used for simple variable parameters" [p. 368]. Consider a Fortran subroutine, Testit(n,m), called with the statement Call Testit(i,i). If Fortran is using call-by-reference, then, in the body of Testit, n and m will be aliases of each other. However, if Fortran is using call-by-value-result, then n and m will not be aliases. Use this idea to test if the three Fortran compilers we have (f77, f90, and f95) use call-by-reference or call-by-value-result. Include in your submission: a) your program; b) a copy of your test compile-and-run for f77, f90, and f95; c) your conclusion about the three Fortran compilers.