CSE 378 Autumn 1999

Machine Organization and Assembly Language Programming

Problem Set #2

Due: Thursday, October 14

1. By the end of the second week, you should have read Chapter 1, Chapter 3, Chapter 4 (Sections 4.1 to 4.4) and Appendix A Sections A1, A2, A6, A9, A10 (not every line of the latter!)

2. Do but do not turn in the exercise "Familiarization with SPIM" (go to the 378 Home page and follow the links to "Help resources" and then "Exercise: Familiarization with SPIM"). The use of *xspim* could be very valuable to check or even give you answers to some of the following exercises.

3. In Chapter 3 do the following exercises (recall that $zero stands for register 0 and $at for register 1).

   - Ex. 3.1 (give the answer as a function of n; 3.5; 3.6; 3.10 (Note that for some implementations of SPIM, some of the pseudo instructions generated an error. Did that happen to you and, if so, for which one?); 3.11
   - Ex. 3.19. Do it only for the load-store and stack architectures. One of our future programming assignments will be based on the stack architecture concept, so this exercise is important.

4. In Chapter 4 do exercises 4.10, 4.14 (not part (c)), and 4.19.