

CMSI 585
PROGRAMMING LANGUAGES
(GRADUATE LEVEL)
Fall 2005

Assignment 1108

This assignment merely reiterates the three questions which required discussion that we weren't able to reach last week; nothing new (yet) with regard to types, since it will be cleaner to carve them out for next week. The "not for submission" looks forward to types though — so you can work on those this week if you haven't done those yet.

Not for Submission

1. Read Scott Chapter 7.
2. Install and learn the JUnit unit testing framework for JavaScript; you'll need it soon.
3. Spend more time with ML; you'll also do more of it soon.

For Submission

As usual, submit code on hardcopy and by e-mail, and submit all other exercise responses on hardcopy. The ML unit tests are homebrewed and were provided in the *assertFactorial.sml* handout last week.

1. Do Scott exercise 6.24 in ML, in two files: (1) define the *factorial* function in a file called *yourLastName_factorial.sml* (just the filename, not the function name — that should stay as *factorial*), (2) test your *factorial* function in *yourLastName_testFactorial.sml*, using the ML unit test functions provided in the *assertFactorial.sml* handout.
2. How would one determine whether or not a programming language implementation detects and transforms tail recursions?
3. Answer Scott exercise 6.27.