Guidelines for Elective Extra Credit Problems
CSc 372, Fall 2006

Students who are interested in improving the *Assignments and Quizzes* portion of their grade can do so by successfully completing some number of elective extra credit problems according to the following guidelines.

As an example to work with, imagine that a student earns 480 of the 640 possible points on assignments and quizzes (A&Q). For that 75% average the student will earn only 48 of the possible 64 corresponding points on the final grade. Imagine that the same student undertakes 200 points of extra credit problems and earns 190 of those 200 points. Those points are averaged in with the regular A&Q points. The student's A&Q average in this alternative situation would be (480+190)/(640+200) = 79.8%, which corresponds to 51 of the 64 homework points, an improvement of 3 points on the final average.

If you're interested in pursuing some extra credit under these terms the first step is to negotiate with me on problems and point values. One class of possibilities is to do some of the problems from our assignments in a different language, like `mtimes.sml` or `pancakes.hs` (Haskell!). Another possibility is to take assignments from another course and do them in one of the languages we're studying—maybe do a portion of a 335 project in JRuby. Another possibility is to write programs that use portions of our three languages that we haven't touched, like the imperative aspects of ML or threads in Ruby. There are lots of other possibilities, too.

As I wrote in the *Make Your Own Assignment* section of assignment 5, it's virtually impossible to be completely equitable when settling on how many points a problem is worth. Good negotiators and estimators can end up with an advantage but backfires are possible, too.

Part of the work on an elective problem will be to assemble a "one button" test suite that provides good evidence that the code works. This may be a tester script or something of your own design. BE SURE to include a `Readme` file that describes how to test it.

The deadline for extra credit submissions is Sunday, ~~December 10, at 23:59:59~~ December 17 at noon, MST.

Submit your work using the `turnin` tag `372_extra`. **Send a note to `cs372-staff` when you've turned it in.** We'll grade submissions in the order received, barring difficulties when grading. Depending on the number of submissions and when they come in it may not possible to get them all graded in time to make the final grade submission deadline. Include in the `Readme` file instructions about what we should do if we can't get yours graded in time. There are two options: (1) Take an "incomplete"—a grade of "I". (2) Request that we ignore the extra credit submission. As a rule, taking an incomplete is no big deal—I simply submit a form that turns the "I" into a final letter grade—but your situation may be different.

Poorna and I will be happy to offer assistance on extra credit problems but that work will have lower priority than our primary course responsibilities. Questions relating to extra credit problems will be given lower priority during office hours than questions relating to the regular assignments.

If you're interested in this opportunity be sure to understand the math of it. Also, avoid surprises by negotiating with me on problems and points up front.