**Final Project**

Write a program that will do some calculations that are relevant to your research and will help answer some question that you could not answer without the aid of a computer. For instance, by now you have developed several tools for analyzing structures. Your program could analyze many structures in terms of RMSD, temperature factor, secondary structure, etc. You could write a "wrapper" program that will run some other piece of software many times on different pieces of data. You could analyze curves from some chromatograms. Use your imagination. You have one week to think about it, so put a lot of effort into defining the problem.

**Proposal**

The first part of the assignment is to write a proposal of what you are going to do. This is **due on 04/06/10**. The proposal should include a statement of the problem you are trying to address, some discussion of the background and relevance of the project, and a summary of the approach you will use for the analysis. I will evaluate your proposal and make comments.

**Programming and analysis**

The second part of the assignment is to write the actual code and use it to analyze the problem you have defined. The code should be modular, should use functions, should include comments, and should be user friendly. *Finally, your program, when it is run, should create a webpage that contains a summary of the analysis.* I will be grading based on all of these criteria. I will be much less lenient with the grading of the final project than I was with the homework assignments.

**Presentation**

The final part of the assignment is that you will be required to prepare a presentation where you describe your results, and how your code and algorithms function. Presentations should last 10-13 minutes and should include an introduction to the problem, how your program works, and the results that you get for your particular data. The schedule for the presentations is below.

**04/13/10**

Matt Teague
John Spear
Yimin Miao
Steven Rowland
Nicholas Leake

**04/15/10**

Hanaa Hariri

Nathalie Munoz
Susan Boerner
Andrew Malowney
Buddy Harris

**04/20/10**
Alexis Cocozaki
Rimanas Slegeris
Virginia Eller
Anna Kozlova
Mark Greeley

**04/22/10**
Carley Farst
Liam Longo
Hoan Huynh
Naed Gonzales Centeno
Karlo Martin

**Grading**
You will be graded on your proposal, presentation, and your final code. The final code will be **due 04/27/2010**. You should place the python files and example inputs in a directory called “final” in your home directory on pinto. Be sure that the program will run on pinto.