Programming project 2, milestone 1 — due on Thursday 2 November 2000

The aim is to examine virtual memory management algorithms employed by the operating system.

This programming project involves experimental tool collection and tool building, but probably much less programming in the usual sense than the previous project.

In the first week, you are to do the following:

1. Collect a series of programs of interest to you, otherwise known as *benchmarks*. For example, if you are interested in "high-performance object-oriented numeric codes for simulation", your set may include a Java program for a fusion chamber simulation, with specified inputs.

2. Collect and/or build the tools that will allow you to trace the execution of a program and report all memory references. That is, the tools report the sequence of loads and stores together with memory addresses they access. (These are virtual memory addresses.)

Some tools that you will find are machine-dependent, or operating-system-dependent, or restricted to certain programming languages. Make sure that the your chosen tools do work with your set of benchmarks.

Documentation. You should write a detailed document on everything you do in the project. You will develop the project in stages, so the document will need to be updated. You must hand in the current version of the document at each milestone.