PERFORMANCE EVALUATION AND OPTIMIZATION
sorttest-draft

1   What you are writing

The *sorttest* experiments provided an opportunity to measure the running time of the implementation of a collection of sorting algorithms. We got to examine the performance over a range of array sizes over multiple runs. We were able to see the point at which array length, and the *big-O* analysis of these algorithms, begins to dominate the outcome; we could also see the efficiency of each algorithm on arrays that are smaller.

We found some anomalous results that required a more detailed examination of both the sorting algorithms' implementations, as well as our own code to test them. Close examination of the code changed our hypothesis about the cause of these anomalies, and we designed an experiment that confirmed (mostly!) our intuitions.

Your paper: A short paper (often called an *extended abstract*) should be no more than 5 single-spaced pages, which includes all plots, captions, headers, etc. It should be structured like so:

0. *Title:* Take this one seriously. What is this paper about? Be clear and compelling.

1. *Introduction:* Present the problem/question being addressed, and define terms where needed. Provide motivation as to why it might matter to the reader. Provide the conclusions—don't hide the ball, just lay out what the result is.

2. *Experimental design:* What are you going to test, and how are you going to test it?

3. *Experimental results:* Show the outcome of the tests. Provide analysis as to what this data and these plots imply.

4. *Conclusions:* Restate the results that matter. Note questions that have *not* been answered, and specify (where possible) how they could be answered.

Keeping it anonymous: Don't put your name on your paper. I will know, thanks to the submission system, which paper was written by which author. We want this anonymity for the review process, described below.

2   What will be coming next

After you submit this work, your paper will be anonymously redistributed to two other students in the class. You will therefore receive two drafts, written by other students, that you will review. More on the review process will be posted later.

After the reviews are sent to the authors of their respective drafts, there will be one final opportunity to incorporate that feedback into a final version of your paper.

3   Submitting your work

Submit a PDF of your completed draft to the CS submission systems web page at `www.cs.amherst.edu/sub`

This assignment is due on Wednesday, Apr-03, 6:00 am.