15-849(C) Parallel Computing 23 Nov 98
Homework Assignment 4

Due Date: Friday, Dec 11

Your task (if you are not doing a project of your own choosing) is to write a fast parallel implementation of a sort on the Cray T3E. You should sort 10^7 keys on up to 32 processors, or more if you like.

You are welcome to use any sort you want and any language you want. The best supported language for the T3E, however, is MPI (I've included information off of the web page).

As with the previous assignment you can just hand in a pointer to the directory with your assignment (an afs directory readable by me). You should describe your algorithm (briefly) and report your times in a file called *results* in the directory. I would like to see times for processors in powers of 2 from 4 to 32.

My measured times for sorting 10 million keys on 1 processor is about 9 seconds. If you come up with an interesting algorithm, however, I will not dock you if does not get great speedups.