Lauren Yeung, Albert Wang

CS 111 Eggert

Lab 1C: Benchmarks

To test the differences in time between SimpSH, Bash, and Execline, these commands were run on lnxsrv09.seas.ucla.edu.

Each command was averaged 5 times to generate the data in the table.

The two tables detail the averages for user time and for system time.

The tests were nontrivial as the files were at least 10MB or larger.

All children completed in 1.049159 seconds.

1.018214 seconds were spent in user mode.

0.030945 seconds were spent in kernel mode.

The commands for simpsh are in the test.sh file.

The bash and execline are located in the readme.

User Time

Benchmark 1: sort

Benchmark 2: cat multiple times

Benchmark 3: cat, sort, translate, translate

User Time (in seconds)

	SimpSH	Bash	Execline
Benchmark 1	1.159	1.026	1.031
Benchmark 2	0.001	0.002	0.001
Benchmark 3	0.963	1.134	0.903

System Time (in seconds)

	SimpSH	Bash	Execline
Benchmark 1	0.027	0.017	0.029
Benchmark 2	0.133	0.045	0.097
Benchmark 3	0.063	0.102	0.005

Based on the results, they are inconclusive as execline varies between the times. However, Execline seems to be have been timed faster based on a few of the benchmarks. SimpSH and Bash fluctuated for user time and system time. The other commands in user and system for execline were comparatively above and below the times for SimpSH and Bash.

There was no clear winner in fastest running time.