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Report

TEST CASES

	bash/dash	simpsh
Test Case 1:	<code>sort < pg98.txt cat b - tr A-Z a-z > c 2>> d</code>	<code>./simpsh --rdonly pg98.txt --pipe --pipe --creat --trunc --wronly c --creat --append --wronly d --command 3 5 6 tr A-Z a-z --command 0 2 6 sort --command 1 4 6 cat b - --close 2 --close 4 --profile --wait</code>
Test Case 2:	<code>cat pg98.txt sort grep "the" >c 2>d</code>	<code>./simpsh --rdonly pg98.txt --pipe --pipe --wronly c --wronly d --command 3 5 6 grep "the" --command 0 2 6 cat --command 1 4 6 sort --close 1 --close 2 --close 3 --close 4 --profile --wait</code>
Test Case 3:	<code>cat pg98.txt sort wc -l >c 2>d</code>	<code>./simpsh --rdonly pg98.txt --pipe --pipe --wronly c --wronly d --command 3 5 6 wc -l --command 0 2 6 cat --command 1 4 6 sort --close 1 --close 2 --close 3 --close 4 --profile --wait</code>

For Test Case 1, my output file c has the contents of file b
For Test Case 2, my output file c has the lines starting with "the"
For Test Case 3, my output file c has 1627 when running any of the commands.

EXPERIMENTAL DATA

	Bash	Dash	Simpsh
Test Case 1:	0m0.000s 0m0.003s 0m0.053s 0m0.011s	0m0.000s 0m0.006s 0m0.097s 0m0.014s	0.000000s 0.000118s 0.059120s 0.007760s
Test Case 2:	0m0.002s 0m0.002s 0m0.094s 0m0.015s	0m0.003s 0m0.003s 0m0.103s 0m0.007s	0.000000s 0.000135s 0.057437s 0.006892s
Test Case 3:	0m0.000s 0m0.003s 0m0.048s 0m0.009s	0m0.002s 0m0.002s 0m0.053s 0m0.004s	0.000000s 0.000184s 0.110054s 0.005979s

CONCLUSIONS

Since I use the large text file provided as my input file, this data is based on how effective each of the versions is on large files. In the three test cases, simpsh is usually faster in terms of both of the system times (shell and children), faster for the user shell time, and slower for the user children time (except for test case 2). In addition, bash tends to be faster in dash in most of the cases but simpsh is still the most efficient.