

# LAB 1 REPORT

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## TEST CASES

	Bash/Dash	Simpsh
1	cat pg98.txt   \ sort   \ tr A-Z a-z   \ wc > out.txt \ 2>err.txt; times	./simpsh \ --rdonly pg98.txt \ --pipe --pipe --pipe \ --wronly out.txt \ --wronly err.txt \ --command 0 2 8 cat \ --command 1 4 8 sort \ --command 3 6 8 tr A-Z a-z \ --command 5 7 8 wc \ --close 1 --close 2 --close 3 \ --close 4 --close 5 --close 6 \ --wait --profile
2	cat pg98.txt   \ sed -n '/a/d'   \ sed -n '/b/d'   \ cat >out.txt \ 2>err.txt; times	./simpsh \ --rdonly pg98.txt \ --pipe --pipe --pipe \ --creat --excl --wronly out.txt \ --creat --excl --wronly err.txt \ --command 0 2 8 cat \ --command 1 4 8 sed -n '/a/d' \ --command 3 6 8 sed -n '/b/d' \ --command 5 7 8 cat \ --close 1 --close 2 \ --close 3 --close 4 \ --close 5 --close 6 \ --wait --profile
3	cat pg98.txt   \ cat > 1.txt   \ cat 1.txt > 2.txt   \ cat 2.txt > 3.txt   \ cat 3.txt > out.txt \ 2>err.txt; times	./simpsh \ --rdonly pg98.txt \ --rdwr 1.txt \ --rdwr 2.txt \ --rdwr 3.txt \ --wronly out.txt \ --wronly err.txt \ --command 0 1 5 cat \ --command 1 2 5 cat 1.txt \ --command 2 3 5 cat 2.txt \ --command 3 4 5 cat 3.txt \ --wait --profile

## RESULTS

	Dash	Bash	Simpsh
<b>Test 1</b> Kernel -User Time -Sys Time Child -User Time -Sys Time	<b>0m0.000s</b> <b>0m0.000s</b> <b>0m0.100s</b> <b>0m0.010s</b>	0m0.001s 0m0.001s 0m0.112s 0m0.014s	<b>0m0.000s</b> 0m0.780s 0m0.532s 0m0.107s
<b>Test 2</b> Kernel -User Time -Sys Time Child -User Time -Sys Time	<b>0m0.000s</b> <b>0m0.000s</b> <b>0m0.120s</b> <b>0m0.020s</b>	0m0.003s 0m0.001s 0m0.128s 0m0.025s	<b>0m0.000s</b> 0m0.723s 0m0.198s 0m0.258s
<b>Test 3</b> Kernel -User Time -Sys Time Child -User Time -Sys Time	<b>0m0.000s</b> <b>0m0.000s</b> <b>0m0.120s</b> <b>0m0.030s</b>	0m0.004s 0m0.002s 0m0.133s 0m0.039s	0m0.375s 0m0.412s 0m0.164s 0m0.610s

**Bold is best time for each category.**

**\*\*Tests were taken by putting each command in a separate script file and running script file.**

## CONCLUSION

1. Simpsh performed either worse or the same as bash and dash. I got some pretty slow results compared to Bash and Dash on most tests though.
2. Dash performed the best, getting quick results in every benchmark and only tying with Simpsh for some of the Kernel user times.
3. Bash performed well, as in being close to dash's times and beating simpsh by a large margin.