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BENCHMARK 1=
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./simpsh --profile --rdonly a.txt --pipe --creat --wronly b.txt --creat --wronly c.txt --pipe --command 0 2 4 sort --command 1 6 4 sed 's/[0-9]*//g' --command 5 3 4 cat --close 1 --close 2 --close 5 --close 6 --wait

RESULTS:

Children usage data: user time 5s 676203µs Kernel time 0s 91036µs
Total usage data: user time 1s 14017µs Kernel time 3s 605139µs

Children usage data: user time 5s 774436µs Kernel time 0s 82948µs
Total usage data: user time 1s 77942µs Kernel time 3s 627024µs

Children usage data: user time 5s 695562µs Kernel time 0s 85412µs
Total usage data: user time 1s 29709µs Kernel time 3s 586472µs

Average simpsh:

Total usage: user = 1.040s
Kernel = 3.606s

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sort a.txt | sed 's/[^0-9]*//g' |cat > b.txt 2> c.txt

BASH RESULTS:
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real 0m0.927s
user 0m2.040s
sys 0m0.039s

real 0m0.935s
user 0m2.024s
sys 0m0.053s

real 0m0.908s

user 0m2.012s
sys 0m0.036s

Average bash:

User = 2.025s
Sys = 0.043s

DASH RESULTS

2.03user 0.03system
2.04user 0.04system
1.98user 0.04system

Average dash:

Total user time: 2.017s
Kernel time: .037s

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BENCHMARK 2=
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./simpsh --profile --rdonly a.txt --pipe --creat --wronly b.txt --creat --wronly c.txt --pipe --command 0 2 4 sort -r --command 1 6 4 sort --command 5 3 4 cat --close 1 --close 2 --close 5 --close 6 --wait
---

Children usage data: user time 2s 586270µs Kernel time 0s 55523µs
Total usage data: user time 0s 350928µs Kernel time 1s 328079µs

Children usage data: user time 2s 601191µs Kernel time 0s 50356µs
Total usage data: user time 0s 349750µs Kernel time 1s 312661µs

Children usage data: user time 2s 574844µs Kernel time 0s 58261µs
Total usage data: user time 0s 333726µs Kernel time 1s 325472µs

Average simpsh

Total user time = 0.345s
Kernel = 1.322s

BASH RESULTS:

---

sort -r a.txt | sort | cat> b.txt 2> c.txt

real 0m1.600s
user 0m2.369s
sys 0m0.065s

real 0m1.576s
user 0m2.355s
sys 0m0.057s

real 0m1.584s
user 0m2.367s
sys 0m0.052s

Average bash

User = 2.364s
Sys = .058s

DASH RESULTS:

2.43user 0.06system
2.39user 0.05system
2.41user 0.04system

Average dash

Total user time = 2.410s
Kernel = 0.050s

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BENCHMARK3=
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./simpsh --profile --rdonly a.txt --pipe --creat --wronly b.txt --creat --wronly c.txt --pipe --command 0 2 4 tr a-z A-Z --command 1 6 4 sort -r --command 5 3 4 cat --close 1 --close 2 --close 5 --close 6 --wait

RESULTS:

Children usage data: user time 1s 183156µs Kernel time 0s 36798µs
Total usage data: user time 0s 276826µs Kernel time 0s 984143µs

Children usage data: user time 1s 189728µs Kernel time 0s 30362µs
Total usage data: user time 0s 292014µs Kernel time 0s 968584µs

Children usage data: user time 1s 223241µs Kernel time 0s 31545µs
Total usage data: user time 0s 287533µs Kernel time 1s 8136µs

Average simpsh

User time = 0.285s
Kernel = 0.654s

BASH RESULTS:
---

tr a-z A-Z < a.txt | sort -r | cat > b.txt 2> c.txt

real	0m1.309s
user	0m1.224s
sys	0m0.037s

real	0m1.417s
user	0m1.195s
sys	0m0.037s

real 0m1.305s
user 0m1.222s
sys 0m0.033s

Average bash

User time = 1.213s
Kernel = 0.036s

DASH RESULTS:

1.21user 0.03system
1.21user 0.03system
1.20user 0.04system

Average dash

User time = 1.207s
Kernel = 0.033s

	Benchmark 1		Benchmark 2		Benchmark 3	
Average(**s)**	User	Kernel	user	kernel	User	Kernel
Simpsh	**1.040s**	**3.606s**	**0.345s**	**1.322s**	**0.285s**	**0.654s**
Bash	**2.025s**	**0.043s**	**2.364s**	**.058s**	**1.213s**	**0.036s**
Dash	**2.017s**	**.037s**	**2.410s**	**0.050s**	**1.207s**	**0.033s**

When it comes to user mode simpsh was much faster than both bash and dash. This is a bit surprising as I thought the implementation of bash/dash would be over all faster than anything

I could write. However, in kernel mode it seems that both bash and dash beat simpsh. This is probably due to the fact that dash in particular which was a bit faster in kernel mode is a lightweight shell.