

### Calls to Simulator with a 1K Byte Cache

- instructions executed equal to number of calls using Technique A
- all techniques resulted in the same exact number of hits and misses

Program	Hit Ratio	Instructions Executed	Relative to Technique A					
			B	C	D	E	F	G
compact	95.25%	4,699,295	26.51%	13.21%	10.92%	8.03%	8.03%	8.03%
cpp	93.78%	1,322,671	26.53%	15.75%	11.07%	11.01%	11.02%	11.02%
diff	99.54%	3,425,264	29.83%	15.07%	3.22%	1.22%	0.77%	0.77%
lex	99.48%	36,844,880	50.55%	19.47%	2.32%	1.89%	0.94%	0.94%
sed	96.49%	1,643,093	45.86%	26.84%	6.99%	6.92%	5.32%	5.32%
sort	96.91%	1,778,463	34.36%	18.49%	12.24%	12.59%	12.59%	12.59%
tbl	86.59%	2,715,097	30.70%	19.65%	17.28%	16.78%	16.36%	16.24%
yacc	98.63%	23,960,045	44.58%	22.89%	5.17%	4.52%	3.51%	3.51%
average	95.83%	9,548,601	36.12%	18.92%	8.65%	7.87%	7.32%	7.30%

## Execution Time with a 1K Byte Cache

- ratios include time for both trace generation and analysis
- times obtained by taking average of ten executions

Program	Ratio to Execution Time without Tracing						
	A	B	C	D	E	F	G
compact	124.57	51.35	40.23	33.22	25.70	25.74	25.80
cpp	113.05	47.83	40.24	31.55	31.62	31.62	31.67
diff	83.04	35.64	26.51	8.31	5.20	4.50	4.51
lex	188.68	118.70	73.37	15.13	13.68	10.69	10.69
sed	143.18	87.62	72.85	24.94	25.35	22.05	22.05
sort	161.03	83.41	64.75	46.39	47.64	47.72	47.64
tbl	49.65	25.22	22.88	21.01	21.10	20.82	20.35
yacc	124.56	75.12	54.82	17.29	16.46	14.20	14.09
average	123.47	65.61	49.46	24.73	23.34	22.17	22.10

## Execution Time with a 1K Byte Cache and No Context Switches

- about 70% of the overhead when context switches are performed

Program	Ratio to Execution Time without Tracing						
	A	B	C	D	E	F	G
compact	115.72	45.72	33.28	28.00	20.70	21.10	20.78
cpp	97.57	40.97	33.21	25.13	25.30	25.37	25.34
diff	64.44	27.94	19.51	5.09	2.69	2.03	2.04
lex	139.62	84.40	44.52	7.37	6.02	4.11	4.11
sed	111.16	59.60	46.96	15.61	15.86	13.30	13.76
sort	121.23	55.17	41.93	31.38	31.00	31.65	31.77
tbl	41.83	20.38	17.59	15.67	15.48	15.18	15.27
yacc	94.81	51.46	35.09	10.24	9.30	9.35	9.31
average	98.30	48.21	34.01	17.31	15.80	15.26	15.30