

Table 1 the generation time of *Flex*

Run	Bottom-up					Top-down				
	2-wise	3-wise	4-wise	5-wise	6-wise	2-wise	3-wise	4-wise	5-wise	6-wise
round-1	41	27	30	39	51	1	8	35	115	85
round-2	28	27	30	37	48	2	8	36	131	76
round-3	29	27	29	41	48	1	7	32	115	73

Table 2 the generation time of *Grep(SIR)*

Run	Bottom-up					Top-down				
	2-wise	3-wise	4-wise	5-wise	6-wise	2-wise	3-wise	4-wise	5-wise	6-wise
round-1	4027	3115	3455	4394	2971	4	18	76	198	4459
round-2	3196	3102	3260	3343	3643	2	17	77	201	5560
round-3	2040	3114	3155	3355	3661	3	16	76	212	3344

Table 3 the generation time of *Gzip*

Run	Bottom-up					Top-down				
	2-wise	3-wise	4-wise	5-wise	6-wise	2-wise	3-wise	4-wise	5-wise	6-wise
round-1	104820	110562	120288	106156	110664	1	11	41	169	105868
round-2	110334	108128	110686	111474	113024	2	11	42	170	110482
round-3	113617	106653	111039	108750	109052	2	11	41	169	111124

Table 4 the generation time of *Make*

Run	Bottom-up					Top-down				
	2-wise	3-wise	4-wise	5-wise	6-wise	2-wise	3-wise	4-wise	5-wise	6-wise
round-1	35	25	27	30	43	1	2	14	77	72
round-2	28	26	26	32	44	1	5	17	72	64
round-3	28	25	28	33	45	0	2	12	67	64

Table 5 the generation time of *Sed*

Run	Bottom-up					Top-down				
	2-wise	3-wise	4-wise	5-wise	6-wise	2-wise	3-wise	4-wise	5-wise	6-wise
round-1	4361	6480	4356	4534	4627	5	26	62	239	5182
round-2	4324	2703	3935	4549	4631	5	28	63	237	5145
round-3	4303	4342	3882	4510	4619	5	28	66	252	7750

Table 6 the generation time of *Findutils*

Run	Bottom-up					Top-down				
	2-wise	3-wise	4-wise	5-wise	6-wise	2-wise	3-wise	4-wise	5-wise	6-wise
round-1	45	36	151	1348	9098	4	73	947	7963	15202
round-2	43	37	151	1329	8793	4	73	945	7890	13914
round-3	43	37	152	1337	8766	3	74	959	7952	13879

Table 7 the generation time of *Grep(CoRE)*

Run	Bottom-up					Top-down				
	2-wise	3-wise	4-wise	5-wise	6-wise	2-wise	3-wise	4-wise	5-wise	6-wise
round-1	28	30	71	462	2967	1	16	193	1904	5112
round-2	29	31	69	453	2947	1	16	193	1887	5069
round-3	30	30	70	453	2941	0	16	193	1877	5075