

Table 1 the generation time of *Flex*

Run	Bottom-up						Top-down					
	2-wise	3-wise	4-wise	5-wise	6-wise	7-wise	2-wise	3-wise	4-wise	5-wise	6-wise	7-wise
round-1	43	27	30	37	52	50	0	4	15	69	177	92
round-2	30	27	32	37	49	58	1	5	15	74	212	84
round-3	31	26	32	39	50	49	1	4	15	79	195	87

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

Run	Bottom-up						Top-down					
	2-wise	3-wise	4-wise	5-wise	6-wise	7-wise	2-wise	3-wise	4-wise	5-wise	6-wise	7-wise
round-1	2077	3197	3920	3406	4949	4668	3	19	72	101	209	5272
round-2	2056	3149	3544	4474	4117	6521	2	18	71	101	208	5270
round-3	2065	3177	3188	3379	5263	5435	3	18	71	101	205	5260

Table 3 the generation time of *Gzip*

Run	Bottom-up						Top-down					
	2-wise	3-wise	4-wise	5-wise	6-wise	7-wise	2-wise	3-wise	4-wise	5-wise	6-wise	7-wise
round-1	201893	111757	110528	152779	141150	140736	1	8	24	68	286	114621
round-2	109549	111664	111536	110882	110055	108880	1	9	23	67	285	110594
round-3	114860	108398	109510	112461	112060	110385	1	9	24	69	281	108621

Table 4 the generation time of *Make*

Run	Bottom-up						Top-down					
	2-wise	3-wise	4-wise	5-wise	6-wise	7-wise	2-wise	3-wise	4-wise	5-wise	6-wise	7-wise
round-1	42	27	27	33	43	87	1	1	10	50	156	99
round-2	29	25	29	34	43	82	1	3	11	48	155	96
round-3	27	34	27	32	43	89	0	2	12	55	181	96

Table 5 the generation time of *Sed*

Run	Bottom-up						Top-down					
	2-wise	3-wise	4-wise	5-wise	6-wise	7-wise	2-wise	3-wise	4-wise	5-wise	6-wise	7-wise
round-1	4116	3852	4816	4356	5714	6363	9	52	116	195	427	8433
round-2	4279	3846	4323	4066	4571	5829	9	53	113	189	428	8408
round-3	4103	4315	4349	3774	5134	5871	9	51	115	192	430	8436

Table 6 the generation time of *Findutils*

Run	Bottom-up						Top-down					
	2-wise	3-wise	4-wise	5-wise	6-wise	7-wise	2-wise	3-wise	4-wise	5-wise	6-wise	7-wise
round-1	45	36	151	1375	9307	35532	4	74	945	8267	44427	60030
round-2	122	37	152	1346	8939	35276	4	78	993	8757	45646	60414
round-3	45	36	153	1357	8901	35198	4	77	980	8630	45992	59959

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

Run	Bottom-up						Top-down					
	2-wise	3-wise	4-wise	5-wise	6-wise	7-wise	2-wise	3-wise	4-wise	5-wise	6-wise	7-wise
round-1	28	31	69	467	2990	15505	1	17	205	1842	11395	27328
round-2	36	29	69	456	2963	15446	1	16	210	1891	11223	27318
round-3	42	31	71	456	2991	15488	1	17	212	1911	11327	27383