

Table 1 the generation time of *Flex*

Run	Bottom-up				Top-down			
	2-wise	3-wise	4-wise	5-wise	2-wise	3-wise	4-wise	5-wise
ronud-1	30	29	32	39	1	10	53	51
ronud-2	35	28	31	38	2	10	54	50
ronud-3	32	31	37	189	1	10	52	52

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

Run	Bottom-up				Top-down			
	2-wise	3-wise	4-wise	5-wise	2-wise	3-wise	4-wise	5-wise
ronud-1	2828	4293	4433	5062	6	35	149	2439
ronud-2	2091	3124	3471	3343	5	36	165	2404
ronud-3	2037	3153	3882	2442	5	36	150	2428

Table 3 the generation time of *Gzip*

Run	Bottom-up				Top-down			
	2-wise	3-wise	4-wise	5-wise	2-wise	3-wise	4-wise	5-wise
ronud-1	108531	109141	107177	110020	2	11	79	112470
ronud-2	108668	109196	109808	111857	1	14	87	114462
ronud-3	110345	110470	109805	107492	2	11	77	111686

Table 4 the generation time of *Make*

Run	Bottom-up				Top-down			
	2-wise	3-wise	4-wise	5-wise	2-wise	3-wise	4-wise	5-wise
ronud-1	40	25	28	32	0	0	31	54
ronud-2	27	26	28	33	0	0	31	41
ronud-3	28	24	26	31	0	0	21	47

Table 5 the generation time of *Sed*

Run	Bottom-up				Top-down			
	2-wise	3-wise	4-wise	5-wise	2-wise	3-wise	4-wise	5-wise
ronud-1	4339	4294	4761	4051	3	49	145	4507
ronud-2	4347	4323	3849	4024	0	52	149	4503
ronud-3	4377	4268	4355	4037	10	54	154	4285

Table 6 the generation time of *Findutils*

Run	Bottom-up				Top-down			
	2-wise	3-wise	4-wise	5-wise	2-wise	3-wise	4-wise	5-wise
ronud-1	43	35	152	1350	4	1094	1094	2027
ronud-2	30	38	158	1370	4	1060	1060	2064
ronud-3	31	37	152	1424	4	1067	1067	1990

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

Run	Bottom-up				Top-down			
	2-wise	3-wise	4-wise	5-wise	2-wise	3-wise	4-wise	5-wise
ronud-1	33	35	116	663	2	24	329	688
ronud-2	37	40	100	704	3	25	334	699
ronud-3	38	41	106	666	2	25	330	704