DIMACS	DIMACS COLORING BENCHMARKS						
File	$\operatorname{Code}$	Nodes	Edges	Colors Needed			
mulsol.i.1.col	(Reg)	197	3925				
mulsol.i.2.col	(Reg)	188	3885				
mulsol.i.3.col	(Reg)	184	3916				
mulsol.i.4.col	(Reg)	185	3946				
mulsol.i.5.col	(Reg)	186	3973				
zeroin.i.1.col	(Reg)	211	4100				
zeroin.i.2.col	(Reg)	211	3541				
zeroin.i.3.col	(Reg)	206	3540				
fpsol2.i.1.col	(Reg)	496	11654				
fpsol2.i.2.col	(Reg)	451	8691				
fpsol2.i.3.col	(Reg)	425	8688				
inithx.i.1.col	(Reg)	864	18707				
inithx.i.2.col	(Reg)	645	13979				
inithx.i.3.col	(Reg)	621	13969				
$le450\_15a.col$	(Lei)	450	8168	15			
le450_15b.col	(Lei)	450	8169	15			
le450_15c.col	(Lei)	450	16680	15			
$le450\_15d.col$	(Lei)	450	16750	15			
$le450\_25a.col$	(Lei)	450	8260	25			
le450_25b.col	(Lei)	450	8263	25			
le450_25c.col	(Lei)	450	17343	25			
$le450\_25d.col$	(Lei)	450	17425	25			
$le450\_5a.col$	(Lei)	450	5714	5			
le450_5b.col	(Lei)	450	5734	5			
$le450\_5c.col$	(Lei)	450	9803	5			
$le450\_5d.col$	(Lei)	450	9757	5			
flat1000_50_0.col.b	(Cul)	1000	245000	50			
flat1000_60_0.col.b	(Cul)	1000	245830	60			
flat1000_76_0.col.b	(Cul)	1000	246708	76			
flat300_20_0.col.b	(Cul)	300	21375	20			
flat300_26_0.col.b	(Cul)	300	21633	26			
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DIMACS COLORING BENCHMARKS (cont.)					
File	$\operatorname{Code}$	Nodes	Edges	Colors Needed	
$flat300\_28\_0.col.b$	(Cul)	300	21695	28	
school1.col	$(\mathrm{Sch})$	385	19095		
school1_nsh.col	(Sch)	352	14612		
latin_square_10.col	(Lat)	900	307350		
$\mathrm{DSJC1000.1.col.b}$	(DSJ)	1000	99258		
$\mathrm{DSJC1000.5.col.b}$	(DSJ)	1000	499652		
$\mathrm{DSJC1000.9.col.b}$	(DSJ)	1000	898898		
DSJC125.1.col.b	(DSJ)	1000	1472		
$\mathrm{DSJC}125.5.\mathrm{col.b}$	(DSJ)	1000	7782		
$\mathrm{DSJC}125.9.\mathrm{col.b}$	(DSJ)	1000	13922		
$\mathrm{DSJC250.1.col.b}$	(DSJ)	1000	6436		
$\mathrm{DSJC250.5.col.b}$	(DSJ)	1000	31336		
$\mathrm{DSJC250.9.col.b}$	(DSJ)	1000	55794		
$\mathrm{DSJC500.1.col.b}$	(DSJ)	1000	24916		
$\mathrm{DSJC500.5.col.b}$	(DSJ)	1000	125248		
$\mathrm{DSJC500.9.col.b}$	(DSJ)	1000	224874		
$\mathrm{DSJR500.1.col.b}$	(DSJ)	1000	7110		
DSJR500.1c.col.b	(DSJ)	1000	242550		
$\mathrm{DSJR500.5.col.b}$	(DSJ)	1000	117724		

Notes:

- Reg (From Gary Lewandowski gary@cs.wisc.edu Problem based on register allocation for variables in real codes. For more instances, see the programs and data in graph/contributed/lewandowski.
- Lei (From Craig Morgenstern morgenst@riogrande.cs.tcu.edu) Leighton graphs with guaranteed coloring size. A reference is F.T. Leighton, Journal of Research of the National Bureau of Standards, 84: 489-505 (1979). For many more instances and programs, see the work in graph/contributed/morgenstern.
- Cul (From Joe Culberson joe@cs.ualberta.ca) Quasi-random coloring problem. For generator, and further information, see program and README.gen in graph/contributed/culberson.
- Sch (From Gary Lewandowski lewandow@cs.wisc.edu) Class scheduling graphs, with and without study halls.

- Lat (From Gary Lewandowski lewandow@cs.wisc.edu) Latin square problem.
- **DSJ** (From David Johnson dsj@research.att.com) Random graphs used in his paper with Aragon, McGeoch, and Schevon, "Optimization by Simulated Annelaing: An Experimental Evaluation; Part II, Graph Coloring and Number Partitioning", Operations Research, 31, 378-406 (1991). DSJC are standard (n,p) random graphs. DSJR are geometric graphs, with DSJR...c being complements of geometric graphs.