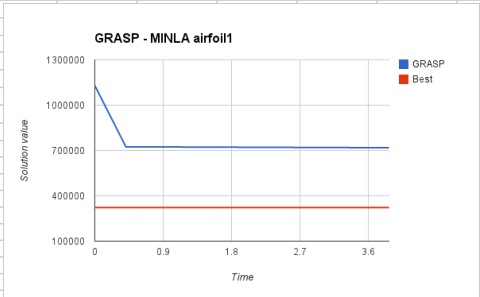
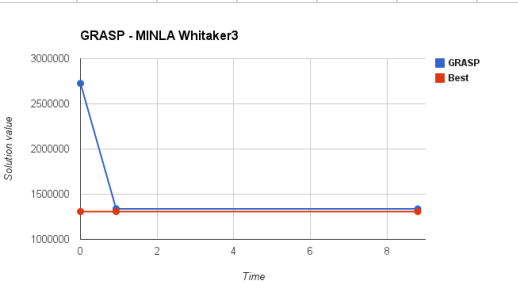


Input	Solutions									
	First	Best 1000	Avg 1000	Time 1000	Best 100	Avg 100	Time 100	Best-know	Jpetit	SD
3elt	1146730	905274	907408.	4.31607	903584	915322.1	0.4560	431737	7023967	52.2195
airfoil1	1129899	718139	721838.	3.87143	724347	728658.8	0.4092	322611	11467686	55.4618
bintree10	136825	112382	112382.	0.639697	112382	112412.8	0.0715	4267	210675	96.2031
c1y	269491	221639	222973.	0.729738	223822	226652.4	0.0767	-	316477	-
c2y	331689	282242	284962.	0.85797	286521	290872.9	0.0899	-	446717	-
c3y	520177	440169	445218.	1.14811	449569	455669.8	0.1221	124117	828414	72.3920
c4y	503001	384365	389834.	1.16648	397981	404119.6	0.1229	115114	867489	71.0755
c5y	435395	335317	340319.	1.04924	341663	350118.4	0.1097	96952	657756	71.6235
gd95c	1359	797	805.3	0.087871	809	819.2	0.0093	-	1120	-
gd96a	317325	253510	256629.	0.8579	252542	259731.1	0.0907	96253	397617	61.8863
gd96b	6180	2242	2250.2	0.121283	2239	2271.4	0.0128	-	3653	-
gd96c	851	688	691.4	0.083473	693	700.3	0.0087	-	1559	-
gd96d	10001	5003	5067.5	0.161754	5151	5211.4	0.0169	-	7814	-
hc10	923780	859474	863702.	1.27106	863392	868411.4	0.1349	523776	1277994	39.3351
mesh33x33	64191	45776	46026.8	0.806718	45910	46405.7	0.0876	32703	495005	28.7672
randomA1	138810	1229477	1237075.	1.37318	123189	1244865.	0.1450	-	1349328	-
randomA2	804477	7469522	7483129.	4.26564	748672	7504823	0.4490	-	7570309	-
randomA3	163676	15560992	15580630	7.89588	1556364	1561004	0.8333	-	15600377	-
randomA4	248145	2214636	2221320.	1.84632	222623	2235419	0.1950	-	2324446	-
randomG4	278462	258660	261106.	1.81093	262538	263654	0.1931	-	1550172	-
small	18	14	14	0.034586	14	14	0.0035	-	-	-
whitaker3	2726359	1336727	1341253.	8.80439	133798	1359430.	0.9291	1307540	57965229	2.2751

whitaker3		
Time	GRASP	Best
0	2726359	1307540
0.929076	1337980	1307540
8.80439	1336727	1307540
airfoil1		
Time	GRASP	Best
0	1129899	322611
0.4092	724347	322611
3.87143	718139	322611



Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100
3elt.gra	1568657	1567868	0.031275	1	4720		907408.8	915322.1
3elt.gra	1556961	1556873	0.031671	1	4720			
3elt.gra	1485877	1485708	0.032052	1	4720			
3elt.gra	1364539	1364303	0.032287	1	4720			
3elt.gra	1310846	1310439	0.031545	1	4720			
3elt.gra	1249233	1248361	0.031284	1	4720			
3elt.gra	1111911	1111624	0.031171	1	4720			
3elt.gra	1062737	1062484	0.031203	1	4720			
3elt.gra	1556961	1058569	0.06901	10	47200			
3elt.gra	1003607	1003444	0.070496	10	47200			
3elt.gra	1003607	1003444	0.030842	1	4720			
3elt.gra	1287725	984352	0.069437	10	47200			
3elt.gra	976505	975796	0.032003	1	4720			
3elt.gra	1262218	972189	0.07005	10	47200			
3elt.gra	976505	957939	0.069698	10	47200			
3elt.gra	1249233	953351	0.070182	10	47200			
3elt.gra	954209	939123	0.070755	10	47200			
3elt.gra	1568657	934189	0.070121	10	47200			
3elt.gra	1062737	929138	0.070334	10	47200			
3elt.gra	1350844	928552	0.453674	100	472000			
3elt.gra	1077309	924827	0.454464	100	472000			
3elt.gra	1309032	922055	0.458717	100	472000			
3elt.gra	1287725	920381	0.458089	100	472000			
3elt.gra	1310846	919260	0.069854	10	47200			
3elt.gra	1281061	914496	0.453663	100	472000			
3elt.gra	1262218	913214	0.455665	100	472000			
3elt.gra	1077374	911945	4.28794	1000	4720000			
3elt.gra	1388806	911589	0.453533	100	472000			
3elt.gra	943824	908787	4.30961	1000	4720000			
3elt.gra	1188501	907915	4.31056	1000	4720000			
3elt.gra	1016583	907306	0.453645	100	472000			
3elt.gra	1015368	907217	0.453175	100	472000			
3elt.gra	1174983	907151	4.3059	1000	4720000			
3elt.gra	1345639	907086	4.29652	1000	4720000			
3elt.gra	930631	906801	4.28151	1000	4720000			
3elt.gra	942209	906720	4.29284	1000	4720000			
3elt.gra	1132204	906552	4.31607	1000	4720000			
3elt.gra	1258672	905857	4.29318	1000	4720000			
3elt.gra	1146730	905274	4.31607	1000	4720000			
3elt.gra	1403930	903584	0.455994	100	472000			

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100
airfoil1.gra	882128	718139	3.87143	1000	4253000		721838.5	728658.8
airfoil1.gra	863521	719391	3.88185	1000	4253000			
airfoil1.gra	1129899	720985	3.87219	1000	4253000			
airfoil1.gra	739674	721012	3.88876	1000	4253000			
airfoil1.gra	887875	722022	3.86279	1000	4253000			
airfoil1.gra	1130779	722198	3.87204	1000	4253000			
airfoil1.gra	828577	722611	3.86954	1000	4253000			
airfoil1.gra	864975	722852	3.87998	1000	4253000			
airfoil1.gra	786861	723998	3.86404	1000	4253000			
airfoil1.gra	1155032	724347	0.409206	100	425300			
airfoil1.gra	1012447	724432	0.408523	100	425300			
airfoil1.gra	955700	725177	3.87342	1000	4253000			
airfoil1.gra	816837	725677	0.409	100	425300			
airfoil1.gra	770570	726261	0.411266	100	425300			
airfoil1.gra	741126	726701	0.411904	100	425300			
airfoil1.gra	801714	728086	0.06217	10	42530			
airfoil1.gra	1096491	729155	0.064046	10	42530			
airfoil1.gra	1016841	729418	0.412779	100	425300			
airfoil1.gra	874056	729834	0.063749	10	42530			
airfoil1.gra	935798	730391	0.411391	100	425300			
airfoil1.gra	909202	731276	0.411931	100	425300			
airfoil1.gra	801022	731289	0.064727	10	42530			
airfoil1.gra	778274	731713	0.406405	100	425300			
airfoil1.gra	734984	734819	0.027643	1	4253			
airfoil1.gra	785619	736372	0.409859	100	425300			
airfoil1.gra	738744	738615	0.062977	10	42530			
airfoil1.gra	738744	738615	0.027627	1	4253			
airfoil1.gra	763189	744399	0.06349	10	42530			
airfoil1.gra	1008841	744628	0.062501	10	42530			
airfoil1.gra	755531	755157	0.063943	10	42530			
airfoil1.gra	755531	755157	0.027963	1	4253			
airfoil1.gra	939640	762020	0.062624	10	42530			
airfoil1.gra	763189	763082	0.028204	1	4253			
airfoil1.gra	1030680	776753	0.063298	10	42530			
airfoil1.gra	801022	800695	0.028093	1	4253			
airfoil1.gra	874056	873826	0.028418	1	4253			
airfoil1.gra	907422	907311	0.027839	1	4253			
airfoil1.gra	1008841	1008461	0.027826	1	4253			
airfoil1.gra	1030680	1030329	0.028181	1	4253			
airfoil1.gra	1096491	1095687	0.027863	1	4253			

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100
bintree10.gra	135379	112382	0.640107	1000	1023000		112382.6	112412.8
bintree10.gra	134917	112382	0.646478	1000	1023000			
bintree10.gra	114202	112382	0.642577	1000	1023000			
bintree10.gra	131215	112382	0.644848	1000	1023000			
bintree10.gra	135549	112382	0.644687	1000	1023000			
bintree10.gra	129269	112382	0.640942	1000	1023000			
bintree10.gra	131195	112382	0.646067	1000	1023000			
bintree10.gra	129371	112382	0.649469	1000	1023000			
bintree10.gra	137335	112382	0.639697	1000	1023000			
bintree10.gra	128767	112382	0.071485	100	102300			
bintree10.gra	136837	112384	0.067105	100	102300			
bintree10.gra	131195	112386	0.070565	100	102300			
bintree10.gra	135541	112388	0.643689	1000	1023000			
bintree10.gra	136825	112392	0.067549	100	102300			
bintree10.gra	120958	112392	0.009431	10	10230			
bintree10.gra	112888	112404	0.00965	10	10230			
bintree10.gra	118586	112412	0.066867	100	102300			
bintree10.gra	118566	112414	0.066793	100	102300			
bintree10.gra	130713	112414	0.066958	100	102300			
bintree10.gra	120334	112416	0.067192	100	102300			
bintree10.gra	135507	112416	0.068396	100	102300			
bintree10.gra	136825	112424	0.009423	10	10230			
bintree10.gra	120914	112424	0.009289	10	10230			
bintree10.gra	118570	112424	0.009726	10	10230			
bintree10.gra	131155	112512	0.067193	100	102300			
bintree10.gra	120442	113004	0.009471	10	10230			
bintree10.gra	135089	113108	0.009353	10	10230			
bintree10.gra	128827	114202	0.009681	10	10230			
bintree10.gra	114206	114206	0.009305	10	10230			
bintree10.gra	135067	114306	0.009346	10	10230			
bintree10.gra	118570	118570	0.003568	1	1023			
bintree10.gra	120442	120442	0.003637	1	1023			
bintree10.gra	120798	120798	0.003673	1	1023			
bintree10.gra	120958	120958	0.003639	1	1023			
bintree10.gra	128827	128827	0.003598	1	1023			
bintree10.gra	135067	135067	0.003565	1	1023			
bintree10.gra	135089	135089	0.003597	1	1023			
bintree10.gra	135391	135391	0.003777	1	1023			
bintree10.gra	136695	136695	0.003521	1	1023			
bintree10.gra	136825	136825	0.003627	1	1023			

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100
c1y.gra	256448	221639	0.729738	1000	828000		222973.8	226652.4
c1y.gra	253956	221901	0.735491	1000	828000			
c1y.gra	267464	222054	0.731736	1000	828000			
c1y.gra	263081	222059	0.729296	1000	828000			
c1y.gra	263959	222168	0.732937	1000	828000			
c1y.gra	257400	222832	0.729389	1000	828000			
c1y.gra	257457	223057	0.734658	1000	828000			
c1y.gra	261891	223504	0.729421	1000	828000			
c1y.gra	264370	223822	0.07665	100	82800			
c1y.gra	247408	224757	0.076815	100	82800			
c1y.gra	262379	224926	0.729888	1000	828000			
c1y.gra	257063	225408	0.076579	100	82800			
c1y.gra	253000	225512	0.076855	100	82800			
c1y.gra	259334	225598	0.731409	1000	828000			
c1y.gra	248179	226036	0.077017	100	82800			
c1y.gra	248283	226103	0.080028	100	82800			
c1y.gra	257692	226734	0.013434	10	8280			
c1y.gra	261542	226755	0.010923	10	8280			
c1y.gra	256732	227412	0.076645	100	82800			
c1y.gra	257699	227637	0.076566	100	82800			
c1y.gra	263402	227901	0.011083	10	8280			
c1y.gra	258305	228323	0.010992	10	8280			
c1y.gra	261744	228554	0.011016	10	8280			
c1y.gra	271305	229147	0.010888	10	8280			
c1y.gra	246369	229477	0.076505	100	82800			
c1y.gra	260684	230242	0.012358	10	8280			
c1y.gra	269491	230360	0.07645	100	82800			
c1y.gra	267680	232941	0.011074	10	8280			
c1y.gra	249674	236130	0.011041	10	8280			
c1y.gra	262102	237289	0.011086	10	8280			
c1y.gra	257121	241837	0.004403	1	828			
c1y.gra	260684	243043	0.004459	1	828			
c1y.gra	261744	243694	0.004386	1	828			
c1y.gra	261542	244754	0.004477	1	828			
c1y.gra	260643	246037	0.004407	1	828			
c1y.gra	263402	246969	0.00459	1	828			
c1y.gra	267680	247063	0.004425	1	828			
c1y.gra	262102	247786	0.005141	1	828			
c1y.gra	264356	249802	0.004371	1	828			
c1y.gra	271305	256936	0.004824	1	828			

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100
c2y.gra	336412	282242	0.85797	1000	980000		284962.3	290872.9
c2y.gra	328246	283539	0.859528	1000	980000			
c2y.gra	336215	284241	0.96426	1000	980000			
c2y.gra	335946	284442	0.861519	1000	980000			
c2y.gra	321354	284821	0.858276	1000	980000			
c2y.gra	322883	285269	0.858899	1000	980000			
c2y.gra	334243	285303	0.85685	1000	980000			
c2y.gra	313794	285888	0.856268	1000	980000			
c2y.gra	331689	286521	0.089912	100	98000			
c2y.gra	310531	286599	0.858381	1000	980000			
c2y.gra	310015	287072	0.090456	100	98000			
c2y.gra	335970	287279	0.86161	1000	980000			
c2y.gra	328262	288585	0.09134	100	98000			
c2y.gra	318891	289209	0.013109	10	9800			
c2y.gra	333442	289917	0.089715	100	98000			
c2y.gra	324617	289977	0.089913	100	98000			
c2y.gra	330504	290969	0.089985	100	98000			
c2y.gra	314337	292975	0.08983	100	98000			
c2y.gra	328913	293687	0.089811	100	98000			
c2y.gra	331964	294311	0.089894	100	98000			
c2y.gra	332843	294715	0.092398	100	98000			
c2y.gra	329109	294759	0.012958	10	9800			
c2y.gra	327446	297244	0.012899	10	9800			
c2y.gra	337968	300259	0.014591	10	9800			
c2y.gra	318891	301733	0.005414	1	980			
c2y.gra	318875	302081	0.005235	1	980			
c2y.gra	328768	302468	0.012881	10	9800			
c2y.gra	341874	302789	0.012927	10	9800			
c2y.gra	332753	304304	0.012896	10	9800			
c2y.gra	337156	304858	0.01294	10	9800			
c2y.gra	337980	305841	0.013514	10	9800			
c2y.gra	337926	309076	0.012893	10	9800			
c2y.gra	328495	310403	0.005257	1	980			
c2y.gra	332753	312139	0.005266	1	980			
c2y.gra	328768	312839	0.005203	1	980			
c2y.gra	327446	313005	0.008185	1	980			
c2y.gra	330541	313824	0.005141	1	980			
c2y.gra	337156	318409	0.005169	1	980			
c2y.gra	337968	320477	0.005641	1	980			
c2y.gra	337980	321409	0.005266	1	980			

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100	
c3y.gra	524740	440169	1.14811	1000	1327000		445218.6	455669.8	
c3y.gra	521246	442628	1.145	1000	1327000				
c3y.gra	507886	443464	1.14645	1000	1327000				
c3y.gra	506369	444017	1.14767	1000	1327000				
c3y.gra	484264	444886	1.14809	1000	1327000				
c3y.gra	508537	446354	1.14925	1000	1327000				
c3y.gra	513828	446572	1.15577	1000	1327000				
c3y.gra	504306	446986	1.14767	1000	1327000				
c3y.gra	515691	447099	1.14719	1000	1327000				
c3y.gra	504028	449569	0.122066	100	132700				
c3y.gra	520177	450011	1.14387	1000	1327000				
c3y.gra	520003	451876	0.120369	100	132700				
c3y.gra	511184	454569	0.119805	100	132700				
c3y.gra	510812	454841	0.121016	100	132700				
c3y.gra	518130	454937	0.122659	100	132700				
c3y.gra	501062	455883	0.122842	100	132700				
c3y.gra	522913	456741	0.01739	10	13270				
c3y.gra	508138	457198	0.120283	100	132700				
c3y.gra	500716	457941	0.122592	100	132700				
c3y.gra	526716	458906	0.120036	100	132700				
c3y.gra	511826	460978	0.121436	100	132700				
c3y.gra	517938	461580	0.017421	10	13270				
c3y.gra	489582	463942	0.007153	1	1327				
c3y.gra	497720	466698	0.017336	10	13270				
c3y.gra	506078	468644	0.017396	10	13270				
c3y.gra	520581	471526	0.017717	10	13270				
c3y.gra	497103	471792	0.017587	10	13270				
c3y.gra	518630	472208	0.017382	10	13270				
c3y.gra	498607	472320	0.01747	10	13270				
c3y.gra	497051	472366	0.017424	10	13270				
c3y.gra	514997	472953	0.017505	10	13270				
c3y.gra	498607	473369	0.007357	1	1327				
c3y.gra	497051	475638	0.007167	1	1327				
c3y.gra	503893	480935	0.007111	1	1327				
c3y.gra	506078	488234	0.007131	1	1327				
c3y.gra	517938	491617	0.00734	1	1327				
c3y.gra	515679	492135	0.007434	1	1327				
c3y.gra	514997	492559	0.009026	1	1327				
c3y.gra	522913	495664	0.007146	1	1327				
c3y.gra	522196	498892	0.007351	1	1327				

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100
c4y.gra	454010	384365	1.16648	1000	1366000		389834.4	404119.6
c4y.gra	503001	384445	1.1752	1000	1366000			
c4y.gra	502971	386121	1.1725	1000	1366000			
c4y.gra	499210	386253	1.1683	1000	1366000			
c4y.gra	494152	387492	1.17066	1000	1366000			
c4y.gra	498295	388246	1.16667	1000	1366000			
c4y.gra	463431	392561	1.16925	1000	1366000			
c4y.gra	493870	395162	1.17342	1000	1366000			
c4y.gra	474201	396782	1.16799	1000	1366000			
c4y.gra	500117	396917	1.17384	1000	1366000			
c4y.gra	474967	397981	0.122902	100	136600			
c4y.gra	495171	398139	0.123041	100	136600			
c4y.gra	495565	402633	0.122589	100	136600			
c4y.gra	481306	403325	0.122987	100	136600			
c4y.gra	502443	403409	0.123269	100	136600			
c4y.gra	507243	405174	0.121931	100	136600			
c4y.gra	493577	406170	0.122992	100	136600			
c4y.gra	471197	407312	0.123098	100	136600			
c4y.gra	502620	407602	0.017761	10	13660			
c4y.gra	507055	408042	0.122696	100	136600			
c4y.gra	497689	409011	0.122497	100	136600			
c4y.gra	490207	413386	0.01784	10	13660			
c4y.gra	488356	418610	0.017713	10	13660			
c4y.gra	482650	419949	0.017867	10	13660			
c4y.gra	478617	419967	0.018102	10	13660			
c4y.gra	463772	420525	0.017842	10	13660			
c4y.gra	467366	420778	0.007449	1	1366			
c4y.gra	482221	425904	0.017885	10	13660			
c4y.gra	461728	425904	0.00739	1	1366			
c4y.gra	493953	426541	0.017984	10	13660			
c4y.gra	513344	427039	0.018373	10	13660			
c4y.gra	486962	427410	0.01781	10	13660			
c4y.gra	478617	430793	0.007381	1	1366			
c4y.gra	486962	432195	0.01048	1	1366			
c4y.gra	476683	432548	0.007255	1	1366			
c4y.gra	487536	439503	0.007279	1	1366			
c4y.gra	488356	444706	0.007344	1	1366			
c4y.gra	497567	448828	0.007406	1	1366			
c4y.gra	490207	455325	0.00732	1	1366			
c4y.gra	513344	480877	0.007516	1	1366			

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100
c5y.gra	420959	335317	1.04924	1000	1202000		340319.9	350118.4
c5y.gra	435395	336499	1.04502	1000	1202000			
c5y.gra	420385	338315	1.05001	1000	1202000			
c5y.gra	433092	339398	1.04515	1000	1202000			
c5y.gra	427113	339457	1.04785	1000	1202000			
c5y.gra	424020	339969	1.04434	1000	1202000			
c5y.gra	435154	341663	0.109686	100	120200			
c5y.gra	431995	342920	1.04768	1000	1202000			
c5y.gra	408433	343122	1.04665	1000	1202000			
c5y.gra	423516	343165	1.04807	1000	1202000			
c5y.gra	411619	344346	0.109779	100	120200			
c5y.gra	420932	345037	1.04808	1000	1202000			
c5y.gra	434393	347320	0.110314	100	120200			
c5y.gra	432173	349391	0.109957	100	120200			
c5y.gra	437639	349814	0.110588	100	120200			
c5y.gra	412998	350248	0.109815	100	120200			
c5y.gra	433862	350805	0.015876	10	12020			
c5y.gra	424949	351128	0.11231	100	120200			
c5y.gra	423296	352616	0.111585	100	120200			
c5y.gra	436242	354601	0.109789	100	120200			
c5y.gra	426433	355428	0.016173	10	12020			
c5y.gra	425685	359097	0.016116	10	12020			
c5y.gra	421585	360057	0.109162	100	120200			
c5y.gra	413552	363255	0.015919	10	12020			
c5y.gra	427985	367132	0.016099	10	12020			
c5y.gra	432878	368396	0.015943	10	12020			
c5y.gra	444075	368470	0.01849	10	12020			
c5y.gra	433907	368556	0.016064	10	12020			
c5y.gra	416559	375064	0.016058	10	12020			
c5y.gra	418317	375728	0.006481	1	1202			
c5y.gra	420351	376572	0.006395	1	1202			
c5y.gra	433575	378269	0.016243	10	12020			
c5y.gra	425685	379996	0.0064	1	1202			
c5y.gra	432878	385583	0.006403	1	1202			
c5y.gra	417846	388497	0.006449	1	1202			
c5y.gra	417269	389083	0.006535	1	1202			
c5y.gra	426433	394161	0.006463	1	1202			
c5y.gra	442095	395143	0.006461	1	1202			
c5y.gra	416918	396452	0.006456	1	1202			
c5y.gra	444075	417579	0.00821	1	1202			

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100	
gd95c.gra	1146	797	0.087871	1000	62000		805.3	819.2	
gd95c.gra	1152	799	0.087421	1000	62000				
gd95c.gra	1272	802	0.088756	1000	62000				
gd95c.gra	1359	803	0.086718	1000	62000				
gd95c.gra	986	806	0.08869	1000	62000				
gd95c.gra	1074	808	0.087781	1000	62000				
gd95c.gra	1217	808	0.088606	1000	62000				
gd95c.gra	1568	808	0.087241	1000	62000				
gd95c.gra	1318	809	0.009282	100	6200				
gd95c.gra	1174	809	0.009221	100	6200				
gd95c.gra	1231	810	0.08958	1000	62000				
gd95c.gra	1247	811	0.00912	100	6200				
gd95c.gra	995	812	0.089006	1000	62000				
gd95c.gra	1328	812	0.009148	100	6200				
gd95c.gra	1133	813	0.009156	100	6200				
gd95c.gra	977	818	0.009264	100	6200				
gd95c.gra	1114	820	0.009409	100	6200				
gd95c.gra	1113	829	0.009274	100	6200				
gd95c.gra	1228	832	0.009289	100	6200				
gd95c.gra	1461	839	0.009918	100	6200				
gd95c.gra	1236	842	0.001319	10	620				
gd95c.gra	1513	844	0.001295	10	620				
gd95c.gra	1364	849	0.00128	10	620				
gd95c.gra	1512	853	0.001314	10	620				
gd95c.gra	1009	854	0.000508	1	62				
gd95c.gra	1418	855	0.001314	10	620				
gd95c.gra	1269	859	0.00131	10	620				
gd95c.gra	1232	870	0.001297	10	620				
gd95c.gra	1126	878	0.001317	10	620				
gd95c.gra	1072	897	0.001335	10	620				
gd95c.gra	1072	981	0.000522	1	62				
gd95c.gra	1059	1003	0.000519	1	62				
gd95c.gra	1083	1019	0.001312	10	620				
gd95c.gra	1081	1025	0.000517	1	62				
gd95c.gra	1126	1045	0.000532	1	62				
gd95c.gra	1125	1115	0.000534	1	62				
gd95c.gra	1302	1122	0.000502	1	62				
gd95c.gra	1206	1134	0.000558	1	62				
gd95c.gra	1236	1214	0.000534	1	62				
gd95c.gra	1513	1249	0.000516	1	62				

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100	
gd96a.gra	318615	252542	0.09068	100	109600		256629.3	259731.1	
gd96a.gra	317325	253510	0.8579	1000	1096000				
gd96a.gra	312551	254259	0.854969	1000	1096000				
gd96a.gra	310465	255183	0.855208	1000	1096000				
gd96a.gra	297105	255351	0.85892	1000	1096000				
gd96a.gra	338933	255806	0.859281	1000	1096000				
gd96a.gra	313659	256729	0.856238	1000	1096000				
gd96a.gra	314768	257786	0.859883	1000	1096000				
gd96a.gra	316969	258076	0.089531	100	109600				
gd96a.gra	317360	258520	0.089374	100	109600				
gd96a.gra	330211	258603	0.853743	1000	1096000				
gd96a.gra	309889	258633	0.089641	100	109600				
gd96a.gra	347379	259015	0.858375	1000	1096000				
gd96a.gra	303021	259445	0.089215	100	109600				
gd96a.gra	313803	259755	0.089762	100	109600				
gd96a.gra	296635	260051	0.858452	1000	1096000				
gd96a.gra	314112	260742	0.089648	100	109600				
gd96a.gra	297710	261884	0.012526	10	10960				
gd96a.gra	297710	261884	0.004791	1	1096				
gd96a.gra	315070	262133	0.014473	10	10960				
gd96a.gra	309427	262134	0.093627	100	109600				
gd96a.gra	306072	262709	0.012488	10	10960				
gd96a.gra	315887	263149	0.090953	100	109600				
gd96a.gra	316395	263851	0.012703	10	10960				
gd96a.gra	309423	264258	0.012577	10	10960				
gd96a.gra	309084	264315	0.09159	100	109600				
gd96a.gra	319862	265482	0.012693	10	10960				
gd96a.gra	319899	265759	0.012583	10	10960				
gd96a.gra	318977	266960	0.012514	10	10960				
gd96a.gra	316008	268404	0.012601	10	10960				
gd96a.gra	316008	269083	0.004805	1	1096				
gd96a.gra	316899	270031	0.012484	10	10960				
gd96a.gra	309423	270525	0.004825	1	1096				
gd96a.gra	309250	273355	0.004793	1	1096				
gd96a.gra	321142	273902	0.004821	1	1096				
gd96a.gra	314220	274138	0.004892	1	1096				
gd96a.gra	321893	276849	0.005597	1	1096				
gd96a.gra	315070	277768	0.004815	1	1096				
gd96a.gra	329511	291249	0.004799	1	1096				
gd96a.gra	348965	307723	0.004819	1	1096				

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100
gd96b.gra	3385	2239	0.012778	100	11100		2250.2	2271.4
gd96b.gra	6180	2242	0.121283	1000	111000			
gd96b.gra	3628	2245	0.120073	1000	111000			
gd96b.gra	3368	2245	0.122691	1000	111000			
gd96b.gra	3014	2246	0.121852	1000	111000			
gd96b.gra	2339	2247	0.122103	1000	111000			
gd96b.gra	2962	2248	0.12295	1000	111000			
gd96b.gra	2929	2252	0.012699	100	11100			
gd96b.gra	3363	2253	0.120135	1000	111000			
gd96b.gra	2952	2256	0.120114	1000	111000			
gd96b.gra	3358	2257	0.121758	1000	111000			
gd96b.gra	3471	2263	0.122691	1000	111000			
gd96b.gra	2957	2263	0.013949	100	11100			
gd96b.gra	3571	2264	0.012485	100	11100			
gd96b.gra	3779	2272	0.014617	100	11100			
gd96b.gra	3658	2280	0.01522	100	11100			
gd96b.gra	3484	2282	0.012808	100	11100			
gd96b.gra	3015	2284	0.012773	100	11100			
gd96b.gra	3847	2288	0.014082	100	11100			
gd96b.gra	3010	2290	0.01284	100	11100			
gd96b.gra	2331	2312	0.001742	10	1110			
gd96b.gra	3325	2333	0.001762	10	1110			
gd96b.gra	2368	2337	0.001776	10	1110			
gd96b.gra	2962	2340	0.001748	10	1110			
gd96b.gra	2987	2346	0.001904	10	1110			
gd96b.gra	3238	2353	0.001735	10	1110			
gd96b.gra	3039	2398	0.001756	10	1110			
gd96b.gra	2538	2476	0.000659	1	111			
gd96b.gra	2560	2486	0.001734	10	1110			
gd96b.gra	2560	2486	0.000763	1	111			
gd96b.gra	3105	2593	0.001788	10	1110			
gd96b.gra	3039	2630	0.000658	1	111			
gd96b.gra	6382	2668	0.001744	10	1110			
gd96b.gra	3105	2773	0.000665	1	111			
gd96b.gra	4092	2781	0.000677	1	111			
gd96b.gra	3356	3008	0.000639	1	111			
gd96b.gra	3130	3072	0.000652	1	111			
gd96b.gra	3250	3149	0.000647	1	111			
gd96b.gra	4480	4055	0.000662	1	111			
gd96b.gra	6152	4434	0.000657	1	111			

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100
gd96c.gra	851	688	0.083473	1000	65000		691.4	700.3
gd96c.gra	745	689	0.08403	1000	65000			
gd96c.gra	989	689	0.083861	1000	65000			
gd96c.gra	959	690	0.083761	1000	65000			
gd96c.gra	820	691	0.082073	1000	65000			
gd96c.gra	753	691	0.081512	1000	65000			
gd96c.gra	757	692	0.084644	1000	65000			
gd96c.gra	757	693	0.085326	1000	65000			
gd96c.gra	728	693	0.008699	100	6500			
gd96c.gra	791	694	0.081855	1000	65000			
gd96c.gra	847	696	0.008659	100	6500			
gd96c.gra	764	697	0.082562	1000	65000			
gd96c.gra	784	698	0.010556	100	6500			
gd96c.gra	958	698	0.008818	100	6500			
gd96c.gra	909	698	0.00859	100	6500			
gd96c.gra	931	700	0.008744	100	6500			
gd96c.gra	739	703	0.008895	100	6500			
gd96c.gra	789	705	0.00864	100	6500			
gd96c.gra	860	705	0.008984	100	6500			
gd96c.gra	758	707	0.008755	100	6500			
gd96c.gra	727	715	0.001247	10	650			
gd96c.gra	742	716	0.001231	10	650			
gd96c.gra	878	722	0.001291	10	650			
gd96c.gra	824	725	0.001203	10	650			
gd96c.gra	909	732	0.001215	10	650			
gd96c.gra	983	733	0.001259	10	650			
gd96c.gra	863	744	0.001243	10	650			
gd96c.gra	763	751	0.000476	1	65			
gd96c.gra	854	752	0.001242	10	650			
gd96c.gra	844	778	0.001216	10	650			
gd96c.gra	828	791	0.001222	10	650			
gd96c.gra	844	827	0.000562	1	65			
gd96c.gra	859	827	0.000488	1	65			
gd96c.gra	844	836	0.000485	1	65			
gd96c.gra	863	851	0.000484	1	65			
gd96c.gra	863	863	0.000475	1	65			
gd96c.gra	882	882	0.000477	1	65			
gd96c.gra	964	916	0.000509	1	65			
gd96c.gra	1163	1089	0.000488	1	65			
gd96c.gra	1158	1134	0.000485	1	65			

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100
gd96d.gra	10001	5003	0.161754	1000	180000		5067.5	5211.4
gd96d.gra	6932	5016	0.163177	1000	180000			
gd96d.gra	9886	5019	0.163225	1000	180000			
gd96d.gra	7228	5039	0.164367	1000	180000			
gd96d.gra	7209	5081	0.162718	1000	180000			
gd96d.gra	7731	5084	0.161578	1000	180000			
gd96d.gra	6898	5089	0.162513	1000	180000			
gd96d.gra	7609	5105	0.162483	1000	180000			
gd96d.gra	9683	5108	0.162877	1000	180000			
gd96d.gra	7536	5131	0.161952	1000	180000			
gd96d.gra	9521	5151	0.016901	100	18000			
gd96d.gra	10179	5163	0.016969	100	18000			
gd96d.gra	8894	5173	0.016844	100	18000			
gd96d.gra	7429	5190	0.017495	100	18000			
gd96d.gra	9286	5193	0.016955	100	18000			
gd96d.gra	7177	5195	0.016848	100	18000			
gd96d.gra	7251	5204	0.01798	100	18000			
gd96d.gra	11235	5262	0.017116	100	18000			
gd96d.gra	6855	5271	0.000826	1	180			
gd96d.gra	6662	5278	0.017026	100	18000			
gd96d.gra	9999	5305	0.017194	100	18000			
gd96d.gra	9046	5340	0.002295	10	1800			
gd96d.gra	6793	5384	0.002302	10	1800			
gd96d.gra	8494	5391	0.002418	10	1800			
gd96d.gra	6831	5424	0.000845	1	180			
gd96d.gra	9819	5447	0.002337	10	1800			
gd96d.gra	7597	5449	0.002321	10	1800			
gd96d.gra	7290	5457	0.00234	10	1800			
gd96d.gra	6887	5491	0.000838	1	180			
gd96d.gra	7436	5503	0.000862	1	180			
gd96d.gra	7689	5627	0.002293	10	1800			
gd96d.gra	10292	5653	0.00232	10	1800			
gd96d.gra	10327	5671	0.002297	10	1800			
gd96d.gra	7491	5692	0.002344	10	1800			
gd96d.gra	7491	5692	0.000839	1	180			
gd96d.gra	7366	5706	0.000836	1	180			
gd96d.gra	9046	6055	0.000989	1	180			
gd96d.gra	9110	6665	0.000827	1	180			
gd96d.gra	9317	6729	0.000856	1	180			
gd96d.gra	9732	6732	0.000845	1	180			

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100
hc10.gra	923780	859474	1.27106	1000	1024000		863702.8	868411.4
hc10.gra	923780	862988	1.26441	1000	1024000			
hc10.gra	923780	863244	1.27106	1000	1024000			
hc10.gra	923780	863392	0.134936	100	102400			
hc10.gra	923780	863544	1.27352	1000	1024000			
hc10.gra	923780	863962	1.26799	1000	1024000			
hc10.gra	923780	864128	1.27138	1000	1024000			
hc10.gra	923780	864510	1.27277	1000	1024000			
hc10.gra	923780	864936	1.27374	1000	1024000			
hc10.gra	923780	864950	1.27514	1000	1024000			
hc10.gra	923780	865094	0.134935	100	102400			
hc10.gra	923780	865292	1.26976	1000	1024000			
hc10.gra	923780	866136	0.13505	100	102400			
hc10.gra	923780	867516	0.13572	100	102400			
hc10.gra	923780	868838	0.135353	100	102400			
hc10.gra	923780	869038	0.135795	100	102400			
hc10.gra	923780	869460	0.134722	100	102400			
hc10.gra	923780	871080	0.134359	100	102400			
hc10.gra	923780	871316	0.134736	100	102400			
hc10.gra	923780	872244	0.133925	100	102400			
hc10.gra	923780	873614	0.020891	10	10240			
hc10.gra	923780	877330	0.009462	1	1024			
hc10.gra	923780	878894	0.021333	10	10240			
hc10.gra	923780	879258	0.024215	10	10240			
hc10.gra	923780	879394	0.021364	10	10240			
hc10.gra	923780	880106	0.009669	1	1024			
hc10.gra	923780	881152	0.021108	10	10240			
hc10.gra	923780	881506	0.020898	10	10240			
hc10.gra	923780	882486	0.021377	10	10240			
hc10.gra	923780	888332	0.021194	10	10240			
hc10.gra	923780	891172	0.00948	1	1024			
hc10.gra	923780	894880	0.024909	10	10240			
hc10.gra	923780	899392	0.021213	10	10240			
hc10.gra	923780	900326	0.009452	1	1024			
hc10.gra	923780	907048	0.012046	1	1024			
hc10.gra	923780	913030	0.009599	1	1024			
hc10.gra	923780	919150	0.009438	1	1024			
hc10.gra	923780	920016	0.009346	1	1024			
hc10.gra	923780	923468	0.009372	1	1024			
hc10.gra	923780	923632	0.009721	1	1024			

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100	
mesh33x33.gra	64191	45776	0.806718	1000	1089000		46026.8	46405.7	
mesh33x33.gra	54701	45886	0.807304	1000	1089000				
mesh33x33.gra	74047	45910	0.087601	100	108900				
mesh33x33.gra	49221	45912	0.808384	1000	1089000				
mesh33x33.gra	53893	45935	0.806707	1000	1089000				
mesh33x33.gra	60113	45979	0.813924	1000	1089000				
mesh33x33.gra	75977	45987	0.805531	1000	1089000				
mesh33x33.gra	49628	46103	0.806926	1000	1089000				
mesh33x33.gra	75156	46134	0.807329	1000	1089000				
mesh33x33.gra	83340	46227	0.085375	100	108900				
mesh33x33.gra	86335	46238	0.808193	1000	1089000				
mesh33x33.gra	59768	46318	0.810615	1000	1089000				
mesh33x33.gra	50524	46336	0.086115	100	108900				
mesh33x33.gra	61306	46342	0.084922	100	108900				
mesh33x33.gra	56921	46373	0.085768	100	108900				
mesh33x33.gra	66033	46377	0.085057	100	108900				
mesh33x33.gra	70139	46480	0.08508	100	108900				
mesh33x33.gra	71614	46577	0.086762	100	108900				
mesh33x33.gra	58997	46630	0.012648	10	10890				
mesh33x33.gra	70042	46667	0.085278	100	108900				
mesh33x33.gra	63629	46708	0.012561	10	10890				
mesh33x33.gra	89819	46768	0.08472	100	108900				
mesh33x33.gra	67141	46771	0.012625	10	10890				
mesh33x33.gra	66019	46825	0.012626	10	10890				
mesh33x33.gra	64418	47403	0.012624	10	10890				
mesh33x33.gra	47618	47618	0.005361	1	1089				
mesh33x33.gra	61587	48689	0.01271	10	10890				
mesh33x33.gra	86589	49373	0.012799	10	10890				
mesh33x33.gra	66975	50870	0.012693	10	10890				
mesh33x33.gra	56664	50927	0.012659	10	10890				
mesh33x33.gra	58529	53002	0.012766	10	10890				
mesh33x33.gra	54436	54436	0.005415	1	1089				
mesh33x33.gra	54681	54681	0.005427	1	1089				
mesh33x33.gra	56266	56266	0.005333	1	1089				
mesh33x33.gra	56633	56633	0.005455	1	1089				
mesh33x33.gra	60194	60194	0.005385	1	1089				
mesh33x33.gra	66019	66019	0.005478	1	1089				
mesh33x33.gra	67141	67141	0.005585	1	1089				
mesh33x33.gra	73883	73883	0.005287	1	1089				
mesh33x33.gra	76671	76671	0.00535	1	1089				

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100	
randomA1.gra	1388105	1229477	1.37318	1000	1000000		1237075.7	1244865.3	
randomA1.gra	1420535	1231895	0.144992	100	100000				
randomA1.gra	1414689	1233636	1.36302	1000	1000000				
randomA1.gra	1428486	1234478	1.36543	1000	1000000				
randomA1.gra	1391154	1237278	1.37004	1000	1000000				
randomA1.gra	1411109	1237618	1.36298	1000	1000000				
randomA1.gra	1418366	1237900	1.36646	1000	1000000				
randomA1.gra	1409821	1238181	0.144869	100	100000				
randomA1.gra	1398839	1239566	1.36696	1000	1000000				
randomA1.gra	1399817	1239603	1.36891	1000	1000000				
randomA1.gra	1416387	1240214	1.37042	1000	1000000				
randomA1.gra	1427250	1240987	1.49697	1000	1000000				
randomA1.gra	1396903	1242832	0.146683	100	100000				
randomA1.gra	1404405	1243963	0.1436	100	100000				
randomA1.gra	1371811	1245517	0.143856	100	100000				
randomA1.gra	1427236	1245923	0.144528	100	100000				
randomA1.gra	1397351	1246377	0.14336	100	100000				
randomA1.gra	1401588	1249426	0.021386	10	10000				
randomA1.gra	1401041	1249764	0.144189	100	100000				
randomA1.gra	1418938	1249886	0.145471	100	100000				
randomA1.gra	1409138	1253273	0.021809	10	10000				
randomA1.gra	1392602	1254315	0.145013	100	100000				
randomA1.gra	1397883	1254995	0.021487	10	10000				
randomA1.gra	1421405	1255560	0.021578	10	10000				
randomA1.gra	1389637	1255566	0.02143	10	10000				
randomA1.gra	1415849	1256942	0.009571	1	1000				
randomA1.gra	1423439	1257689	0.022245	10	10000				
randomA1.gra	1439528	1260873	0.021409	10	10000				
randomA1.gra	1412623	1262648	0.022022	10	10000				
randomA1.gra	1405300	1262688	0.021537	10	10000				
randomA1.gra	1409999	1264124	0.022777	10	10000				
randomA1.gra	1411650	1266936	0.009823	1	1000				
randomA1.gra	1409999	1266996	0.00921	1	1000				
randomA1.gra	1401679	1268075	0.009334	1	1000				
randomA1.gra	1401217	1268370	0.009046	1	1000				
randomA1.gra	1406520	1270125	0.009194	1	1000				
randomA1.gra	1400045	1270905	0.009335	1	1000				
randomA1.gra	1423439	1274184	0.009124	1	1000				
randomA1.gra	1422537	1279298	0.009124	1	1000				
randomA1.gra	1400783	1284133	0.009378	1	1000				

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100	
randomA2.gra	8044778	7469522	4.26564	1000	1000000		7483129.5	7504823	
randomA2.gra	8018781	7475125	4.23817	1000	1000000				
randomA2.gra	8043177	7476108	4.24309	1000	1000000				
randomA2.gra	8039490	7476832	4.25757	1000	1000000				
randomA2.gra	8042357	7485120	4.23269	1000	1000000				
randomA2.gra	7965975	7485862	4.2382	1000	1000000				
randomA2.gra	8085215	7486663	4.27601	1000	1000000				
randomA2.gra	7969703	7486724	0.449007	100	100000				
randomA2.gra	7954790	7489842	4.28219	1000	1000000				
randomA2.gra	8060350	7490021	4.24685	1000	1000000				
randomA2.gra	7995844	7490397	0.0314	1	1000				
randomA2.gra	8110072	7496200	4.27491	1000	1000000				
randomA2.gra	7949418	7498511	0.458042	100	100000				
randomA2.gra	8049157	7499166	0.454298	100	100000				
randomA2.gra	8043097	7499738	0.450084	100	100000				
randomA2.gra	8004016	7500288	0.449806	100	100000				
randomA2.gra	8023117	7507852	0.451042	100	100000				
randomA2.gra	7945997	7509214	0.44892	100	100000				
randomA2.gra	8038997	7511940	0.069712	10	10000				
randomA2.gra	7991494	7512620	0.451375	100	100000				
randomA2.gra	8037719	7515092	0.448452	100	100000				
randomA2.gra	7993635	7516059	0.031201	1	1000				
randomA2.gra	8085972	7518334	0.069575	10	10000				
randomA2.gra	8015774	7519025	0.446199	100	100000				
randomA2.gra	8034267	7523955	0.070909	10	10000				
randomA2.gra	8014212	7526916	0.073376	10	10000				
randomA2.gra	8014212	7526916	0.034162	1	1000				
randomA2.gra	8021493	7527598	0.070766	10	10000				
randomA2.gra	8007748	7534019	0.070709	10	10000				
randomA2.gra	8068868	7536819	0.069891	10	10000				
randomA2.gra	7995785	7540626	0.032541	1	1000				
randomA2.gra	8032676	7542759	0.069806	10	10000				
randomA2.gra	8025638	7543321	0.070226	10	10000				
randomA2.gra	7974672	7545493	0.032367	1	1000				
randomA2.gra	8022853	7546999	0.069132	10	10000				
randomA2.gra	8007465	7557084	0.032231	1	1000				
randomA2.gra	7980432	7559063	0.032047	1	1000				
randomA2.gra	7997562	7562554	0.031212	1	1000				
randomA2.gra	8039821	7563418	0.032345	1	1000				
randomA2.gra	8007748	7564588	0.03126	1	1000				

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100
randomA3.gra	16367646	15560992	7.89588	1000	1000000		15580630.1	15610043.9
randomA3.gra	16454505	15563643	0.833294	100	100000			
randomA3.gra	16396037	15569016	7.90131	1000	1000000			
randomA3.gra	16359507	15573121	7.86208	1000	1000000			
randomA3.gra	16377211	15578774	7.90258	1000	1000000			
randomA3.gra	16461343	15580579	7.92896	1000	1000000			
randomA3.gra	16418294	15587050	7.78563	1000	1000000			
randomA3.gra	16420605	15587258	7.81501	1000	1000000			
randomA3.gra	16314467	15587951	7.86817	1000	1000000			
randomA3.gra	16335451	15588016	7.79283	1000	1000000			
randomA3.gra	16358532	15589977	0.837197	100	100000			
randomA3.gra	16466545	15590449	0.130377	10	10000			
randomA3.gra	16371928	15593544	7.882	1000	1000000			
randomA3.gra	16417006	15598147	0.841945	100	100000			
randomA3.gra	16334818	15610495	0.828647	100	100000			
randomA3.gra	16431535	15613772	0.832932	100	100000			
randomA3.gra	16392277	15617664	0.834664	100	100000			
randomA3.gra	16369334	15622399	0.832871	100	100000			
randomA3.gra	16376902	15626479	0.132582	10	10000			
randomA3.gra	16350589	15626519	0.831964	100	100000			
randomA3.gra	16378450	15626843	0.843092	100	100000			
randomA3.gra	16389479	15630651	0.059943	1	1000			
randomA3.gra	16468812	15630980	0.836894	100	100000			
randomA3.gra	16380020	15632690	0.130047	10	10000			
randomA3.gra	16319820	15636327	0.131189	10	10000			
randomA3.gra	16327577	15641007	0.128908	10	10000			
randomA3.gra	16399154	15643693	0.131398	10	10000			
randomA3.gra	16467466	15652200	0.13223	10	10000			
randomA3.gra	16390701	15654545	0.131563	10	10000			
randomA3.gra	16409574	15657244	0.131387	10	10000			
randomA3.gra	16425074	15668084	0.063058	1	1000			
randomA3.gra	16438455	15672695	0.131059	10	10000			
randomA3.gra	16326586	15677148	0.061277	1	1000			
randomA3.gra	16390701	15681871	0.06528	1	1000			
randomA3.gra	16405276	15693371	0.060354	1	1000			
randomA3.gra	16427812	15708945	0.058813	1	1000			
randomA3.gra	16339510	15712203	0.059616	1	1000			
randomA3.gra	16385379	15724557	0.059481	1	1000			
randomA3.gra	16466545	15734949	0.064253	1	1000			
randomA3.gra	16417430	15740985	0.060572	1	1000			

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100	
randomA4.gra	2481450	2214636	1.84632	1000	1000000		2221320.2	2235419.6	
randomA4.gra	2477778	2216129	1.84591	1000	1000000				
randomA4.gra	2467438	2217250	1.84568	1000	1000000				
randomA4.gra	2489740	2218040	1.84647	1000	1000000				
randomA4.gra	2484430	2221144	1.84752	1000	1000000				
randomA4.gra	2503752	2223023	1.83957	1000	1000000				
randomA4.gra	2467283	2224074	1.84563	1000	1000000				
randomA4.gra	2508557	2224382	1.84996	1000	1000000				
randomA4.gra	2482941	2226231	0.194996	100	100000				
randomA4.gra	2492832	2226889	1.83272	1000	1000000				
randomA4.gra	2462929	2227635	1.84994	1000	1000000				
randomA4.gra	2462622	2229143	0.194735	100	100000				
randomA4.gra	2450650	2230109	0.013139	1	1000				
randomA4.gra	2486520	2230380	0.03002	10	10000				
randomA4.gra	2484218	2232622	0.029614	10	10000				
randomA4.gra	2480051	2232706	0.029428	10	10000				
randomA4.gra	2492631	2233229	0.194703	100	100000				
randomA4.gra	2484958	2233437	0.19549	100	100000				
randomA4.gra	2450694	2234305	0.194544	100	100000				
randomA4.gra	2463923	2237842	0.197264	100	100000				
randomA4.gra	2464483	2238743	0.196128	100	100000				
randomA4.gra	2429010	2239154	0.19493	100	100000				
randomA4.gra	2491594	2240180	0.195787	100	100000				
randomA4.gra	2461880	2240493	0.013378	1	1000				
randomA4.gra	2480533	2241932	0.197516	100	100000				
randomA4.gra	2486943	2247456	0.029637	10	10000				
randomA4.gra	2497757	2247798	0.029662	10	10000				
randomA4.gra	2498916	2248067	0.029658	10	10000				
randomA4.gra	2478418	2250336	0.029911	10	10000				
randomA4.gra	2490367	2252098	0.013468	1	1000				
randomA4.gra	2488027	2252578	0.030164	10	10000				
randomA4.gra	2505651	2252875	0.029778	10	10000				
randomA4.gra	2510200	2256771	0.032005	10	10000				
randomA4.gra	2500157	2262691	0.013575	1	1000				
randomA4.gra	2488295	2267742	0.013288	1	1000				
randomA4.gra	2488027	2270293	0.013334	1	1000				
randomA4.gra	2479970	2271360	0.013424	1	1000				
randomA4.gra	2493998	2280419	0.014513	1	1000				
randomA4.gra	2513518	2291171	0.013246	1	1000				
randomA4.gra	2508483	2294408	0.013131	1	1000				

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100
randomG4.gra	278462	258660	1.81093	1000	1000000		261106.9	263654
randomG4.gra	285357	259814	1.80697	1000	1000000			
randomG4.gra	355692	260843	1.81506	1000	1000000			
randomG4.gra	284293	260847	1.80228	1000	1000000			
randomG4.gra	323427	261170	1.80562	1000	1000000			
randomG4.gra	410843	261319	1.81555	1000	1000000			
randomG4.gra	280331	261676	1.81248	1000	1000000			
randomG4.gra	415215	261812	1.79806	1000	1000000			
randomG4.gra	307604	262205	1.80822	1000	1000000			
randomG4.gra	268485	262538	0.193056	100	100000			
randomG4.gra	490510	262549	0.193003	100	100000			
randomG4.gra	402851	262569	0.194173	100	100000			
randomG4.gra	292440	262612	0.192779	100	100000			
randomG4.gra	276086	262723	1.80798	1000	1000000			
randomG4.gra	279278	263325	0.192659	100	100000			
randomG4.gra	318242	263657	0.191482	100	100000			
randomG4.gra	282672	263690	0.029656	10	10000			
randomG4.gra	307118	264519	0.191349	100	100000			
randomG4.gra	317284	264748	0.190974	100	100000			
randomG4.gra	279043	264759	0.190775	100	100000			
randomG4.gra	334843	265264	0.194054	100	100000			
randomG4.gra	269441	269296	0.013076	1	1000			
randomG4.gra	296065	269717	0.029881	10	10000			
randomG4.gra	339374	272601	0.031416	10	10000			
randomG4.gra	297673	273072	0.029136	10	10000			
randomG4.gra	311571	273420	0.03115	10	10000			
randomG4.gra	298172	278836	0.029638	10	10000			
randomG4.gra	326572	279130	0.02917	10	10000			
randomG4.gra	285664	285445	0.013241	1	1000			
randomG4.gra	293206	285593	0.028984	10	10000			
randomG4.gra	287066	286329	0.029632	10	10000			
randomG4.gra	287066	286329	0.013087	1	1000			
randomG4.gra	399235	290342	0.029241	10	10000			
randomG4.gra	294939	294279	0.012987	1	1000			
randomG4.gra	295710	295184	0.012845	1	1000			
randomG4.gra	298423	297068	0.012895	1	1000			
randomG4.gra	298248	297536	0.013212	1	1000			
randomG4.gra	300096	299096	0.013916	1	1000			
randomG4.gra	357987	356757	0.013093	1	1000			
randomG4.gra	388271	387634	0.013145	1	1000			

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100
small.gra	15	14	0.034586	1000	5000		14	14
small.gra	14	14	0.036808	1000	5000			
small.gra	16	14	0.038515	1000	5000			
small.gra	15	14	0.035858	1000	5000			
small.gra	16	14	0.034326	1000	5000			
small.gra	15	14	0.037778	1000	5000			
small.gra	16	14	0.037438	1000	5000			
small.gra	14	14	0.037755	1000	5000			
small.gra	18	14	0.035879	1000	5000			
small.gra	16	14	0.034421	1000	5000			
small.gra	15	14	0.003538	100	500			
small.gra	14	14	0.003772	100	500			
small.gra	15	14	0.003554	100	500			
small.gra	14	14	0.003533	100	500			
small.gra	14	14	0.003709	100	500			
small.gra	15	14	0.003596	100	500			
small.gra	14	14	0.003715	100	500			
small.gra	14	14	0.003517	100	500			
small.gra	14	14	0.003774	100	500			
small.gra	18	14	0.003541	100	500			
small.gra	18	14	0.000509	10	50			
small.gra	15	14	0.000532	10	50			
small.gra	15	14	0.000526	10	50			
small.gra	15	14	0.000547	10	50			
small.gra	18	14	0.000538	10	50			
small.gra	15	14	0.000522	10	50			
small.gra	15	14	0.00052	10	50			
small.gra	15	14	0.00054	10	50			
small.gra	15	14	0.000496	10	50			
small.gra	16	14	0.000507	10	50			
small.gra	14	14	0.000206	1	5			
small.gra	15	14	0.000212	1	5			
small.gra	14	14	0.000227	1	5			
small.gra	14	14	0.000191	1	5			
small.gra	14	14	0.000193	1	5			
small.gra	15	15	0.000239	1	5			
small.gra	15	15	0.000194	1	5			
small.gra	15	15	0.000196	1	5			
small.gra	15	15	0.000202	1	5			
small.gra	15	15	0.000189	1	5			

Input	First solution	Best solution	Execution time	Initial solutions	Total solutions		Avg best sol 1000	avg best sol 100
whitaker3.gra	2726359	1336727	8.80439	1000	9800000		1341253.7	1359430.6
whitaker3.gra	1669020	1337980	0.929076	100	980000			
whitaker3.gra	2006676	1338299	8.78524	1000	9800000			
whitaker3.gra	2482219	1338774	8.80693	1000	9800000			
whitaker3.gra	1429111	1339268	8.74579	1000	9800000			
whitaker3.gra	1391042	1341111	8.73765	1000	9800000			
whitaker3.gra	1733383	1342720	8.79371	1000	9800000			
whitaker3.gra	2652523	1342814	8.79238	1000	9800000			
whitaker3.gra	1706543	1342991	8.78702	1000	9800000			
whitaker3.gra	1773309	1343389	8.7713	1000	9800000			
whitaker3.gra	1823881	1346444	9.50025	1000	9800000			
whitaker3.gra	1349885	1349521	0.065014	1	9800			
whitaker3.gra	2263503	1353823	0.931221	100	980000			
whitaker3.gra	1354251	1353840	0.143277	10	98000			
whitaker3.gra	1539947	1354690	0.932412	100	980000			
whitaker3.gra	1805128	1358023	0.931674	100	980000			
whitaker3.gra	1916796	1362200	0.929193	100	980000			
whitaker3.gra	1367634	1362893	0.933759	100	980000			
whitaker3.gra	1407304	1363207	0.928113	100	980000			
whitaker3.gra	1449720	1363539	0.143901	10	98000			
whitaker3.gra	2165606	1364897	0.9303	100	980000			
whitaker3.gra	1848947	1366979	0.930307	100	980000			
whitaker3.gra	1370004	1369614	0.929317	100	980000			
whitaker3.gra	2239611	1370797	0.145018	10	98000			
whitaker3.gra	1903574	1374252	0.146345	10	98000			
whitaker3.gra	1419949	1374670	0.144613	10	98000			
whitaker3.gra	1378648	1378220	0.146971	10	98000			
whitaker3.gra	1517882	1393638	0.142662	10	98000			
whitaker3.gra	1755193	1436678	0.143939	10	98000			
whitaker3.gra	1476258	1475669	0.067007	1	9800			
whitaker3.gra	1796969	1543332	0.147081	10	98000			
whitaker3.gra	1553966	1553504	0.066021	1	9800			
whitaker3.gra	2632205	1589207	0.152646	10	98000			
whitaker3.gra	1872634	1871715	0.067284	1	9800			
whitaker3.gra	1903574	1902990	0.064924	1	9800			
whitaker3.gra	2349749	2349220	0.068862	1	9800			
whitaker3.gra	2360117	2359721	0.064603	1	9800			
whitaker3.gra	2418579	2417870	0.064703	1	9800			
whitaker3.gra	2498362	2497810	0.065278	1	9800			
whitaker3.gra	2721759	2721369	0.066948	1	9800			