## Stats for each method

		D:		
Number of Nodes	Number of Nodes Visited	Number of Rotations	Depth (after balancing)	Time (S)
1469	24877	2921	10	0
2865	48598	5712	11	0
4206	71374	8390	12	0.001
5492	93212	10958	12	0
6679	113431	13340	12	0.001
7857	133463	15696	12	0.001
9001	152874	17978	13	0
10079	171184	20130	13	0.002
11009 12058	187038 204887	21999 24101	13	0.002
13038	204887	26054	13	0.002
13823	234853	27623	13	0.016
14739	250388	29447	13	0
15530	263874	31038	13	0
16286	276725	32550	13	0.003
16952	288028	33877	14	0.003
17682	300454	35341	14	0.003
19057	323825	38090	14	0
19747	335540	39467	14	0.003
27942 28105	474886 477627	55862 56182	14	0.015
28756	488694	57485	14	0.005
28932	491662	57833	14	0.003
29451	500521	58877	14	0
29546	502123	59064	14	0
29781	506133	59538	14	0.016
29917	508448	59811	14	0
29995	509790	59969	14	0
30127	512024	60232	14	0.015
30239	513932	60457	14	0.015
30288 30401	514768 516681	60556 60779	14	0.005
30613	520259	61199	14	0.003
30641	520743	61255	14	0.021
30775	523023	61525	14	0.005
30871	524670	61720	14	0.005
30898	525090	61766	14	0
31001	526864	61977	14	0.005
31138	529186	62249	14	0.016
31155	529452	62278	14	0
31329	532436	62631	14	0.005 0.016
31407 31487	533761 535150	62788 62952	14	0.016
31507	535459	62986	14	0.007
31532	535908	63042	14	0.015
31609	537209	63194	14	0.016
31704	538811	63382	14	0.006
31745	539540	63469	14	0.002
31754	539681	63486	14	0.006
31836	541083	63651	14	0.006
31864	541521	63699	14	0.006 0.006
31875 31926	541716 542589	63723 63827	14	0.006
31932	542702	63841	14	0.006
31977	543453	63929	14	0.000
32010	544028	63997	14	0
32050	544699	64075	14	0.006
32079	545174	64129	14	0
32139	546222	64255	14	0.006
32173	546783	64319	14	0.007
32183	546963	64341	14	0.016
32186	547042	64353	14	0.006
32221 32239	547621 547909	64419 64452	14	0.015 0.015
32266	548385	64510	14	0.013
32304	549011	64581	14	0
32316	549228	64608	14	0.015
32408	550782	64791	14	0
32412	550854	64800	14	0
32413	550870	64801	14	0.008
32423	551025	64817	14	0
32451	551528	64879	14	0.006
32464	551739 551825	64903	14	0.109
32470	551835	64914	14	0.006

Number of Nodes Visited   Rotations   Time (S)		AVL		
41050404         1416         13         0.517           102507010         2084         14         1.412           158816847         2550         14         2.262           258635242         3262         14         3.896           429186148         3845         15         6.65           389269643         4290         15         5.605           503103538         4673         15         7.473           634480207         5389         15         9.752           1097534666         6006         16         18.28           806654787         6285         15         12.655           994910125         6713         15         16.636           1205746199         7162         15         21.948           1158094186         7491         16         19.308           1418698489         7985         16         24.116           1599313552         8291         16         27.542           1545788653         8549         16         26.454           1980276517         9225         17         35.133           1960340414         9477         16         34.09           49101976 <th></th> <th></th> <th>•</th> <th>Time (S)</th>			•	Time (S)
102507010         2084         14         1.412           158816847         2550         14         2.262           258635242         3262         14         3.896           429186148         3845         15         6.65           389269643         4290         15         5.605           503103538         4673         15         7.473           634480207         5389         15         9.752           1097534666         6006         16         18.28           806654787         6285         15         12.655           994910125         6713         15         16.636           1205746199         7162         15         21.948           1158094186         7491         16         19.308           1418698489         7985         16         24.116           1599313552         8291         16         27.542           1545788653         8549         16         26.454           1980276517         9225         17         35.133           1960340414         9477         16         34.09           49101976         13622         17         83.075           901139942				
158816847         2550         14         2.262           258635242         3262         14         3.896           429186148         3845         15         6.65           389269643         4290         15         5.605           503103538         4673         15         7.473           634480207         5389         15         9.752           1097534666         6006         16         18.28           806654787         6285         15         12.655           994910125         6713         15         16.636           1205746199         7162         15         21.948           1158094186         7491         16         19.308           1418698489         7985         16         24.116           1599313552         8291         16         27.542           1545788653         8549         16         26.454           1980276517         9225         17         35.133           1960340414         9477         16         34.09           49101976         13622         17         83.075           901139942         13581         17         109.142           719825				
258635242         3262         14         3.896           429186148         3845         15         6.65           389269643         4290         15         5.605           503103538         4673         15         7.473           634480207         5389         15         9.752           1097534666         6006         16         18.28           806654787         6285         15         12.655           994910125         6713         15         16.636           1205746199         7162         15         21.948           1158094186         7491         16         19.308           1418698489         7985         16         24.116           1599313552         8291         16         27.542           1545788653         8549         16         26.454           1980276517         9225         17         35.133           1960340414         9477         16         34.09           49101976         13622         17         83.075           901139942         13581         17         109.142           719825942         14108         17         99.889           3410				
389269643         4290         15         5.605           503103538         4673         15         7.473           634480207         5389         15         9.752           1097534666         6006         16         18.28           806654787         6285         15         12.655           994910125         6713         15         16.636           1205746199         7162         15         21.948           1158094186         7491         16         19.308           1418698489         7985         16         24.116           159313552         8291         16         27.542           1545788653         8549         16         26.454           1980276517         9225         17         35.133           1960340414         9477         16         34.09           49101976         13622         17         83.075           901139942         13581         17         109.142           719825942         14108         17         99.889           341077235         14370         17         86.327           404765952         14346         17         87.516				
503103538         4673         15         7.473           634480207         5389         15         9.752           1097534666         6006         16         18.28           806654787         6285         15         12.655           994910125         6713         15         16.636           1205746199         7162         15         21.948           1158094186         7491         16         19.308           1418698489         7985         16         24.116           1599313552         8291         16         27.542           1545788653         8549         16         26.454           1980276517         9225         17         35.133           1960340414         9477         16         34.09           49101976         13622         17         83.075           901139942         13581         17         109.142           719825942         14108         17         99.889           341077235         14370         17         86.327           404765952         14346         17         87.516           1113324941         14377         17         108.937	429186148	3845	15	6.65
634480207         5389         15         9.752           1097534666         6006         16         18.28           806654787         6285         15         12.655           994910125         6713         15         16.636           1205746199         7162         15         21.948           1158094186         7491         16         19.308           1418698489         7985         16         24.116           1599313552         8291         16         27.542           1545788653         8549         16         26.454           1980276517         9225         17         35.133           1960340414         9477         16         34.09           49101976         13622         17         83.075           901139942         13581         17         109.142           719825942         14108         17         99.889           341077235         14370         17         86.327           404765952         14346         17         87.516           1113324941         14377         17         108.937           62166876         14339         17         86.453				
1097534666         6006         16         18.28           806654787         6285         15         12.655           994910125         6713         15         16.636           1205746199         7162         15         21.948           1158094186         7491         16         19.308           1418698489         7985         16         24.116           1599313552         8291         16         27.542           1545788653         8549         16         26.454           1980276517         9225         17         35.133           1960340414         9477         16         34.09           49101976         13622         17         83.075           901139942         13581         17         109.142           719825942         14108         17         99.889           341077235         14370         17         86.327           404765952         14346         17         87.516           1113324941         14377         17         108.937           62166876         14339         17         86.453           541580850         14624         17         89.593				
806654787         6285         15         12.655           994910125         6713         15         16.636           1205746199         7162         15         21.948           1158094186         7491         16         19.308           1418698489         7985         16         24.116           1599313552         8291         16         27.542           1545788653         8549         16         26.454           1980276517         9225         17         35.133           1960340414         9477         16         34.09           49101976         13622         17         83.075           901139942         13581         17         109.142           719825942         14108         17         99.889           341077235         14370         17         86.327           404765952         14346         17         87.516           1113324941         14377         17         108.937           62166876         14339         17         86.453           541580850         14624         17         89.615           1030600502         14302         17         100.97				
994910125         6713         15         16.636           1205746199         7162         15         21.948           1158094186         7491         16         19.308           1418698489         7985         16         24.116           1599313552         8291         16         27.542           1545788653         8549         16         26.454           1980276517         9225         17         35.133           1960340414         9477         16         34.09           49101976         13622         17         83.075           901139942         13581         17         109.142           719825942         14108         17         99.889           341077235         14370         17         86.327           404765952         14346         17         87.516           1113324941         14377         17         108.937           62166876         14339         17         86.453           541580850         14624         17         89.615           1030600502         14302         17         100.97           826632156         14709         17         95.937				
1158094186         7491         16         19.308           1418698489         7985         16         24.116           1599313552         8291         16         27.542           1545788653         8549         16         26.454           1980276517         9225         17         35.133           1960340414         9477         16         34.09           49101976         13622         17         83.075           901139942         13581         17         109.142           719825942         14108         17         99.889           341077235         14370         17         86.327           404765952         14346         17         87.516           1113324941         14377         17         108.937           62166876         14339         17         86.453           541580850         14624         17         89.615           1030600502         14302         17         100.97           826632156         14709         17         95.937           730048434         14321         17         91.493           105078284         14714         17         82.219				
1418698489         7985         16         24.116           1599313552         8291         16         27.542           1545788653         8549         16         26.454           1980276517         9225         17         35.133           1960340414         9477         16         34.09           49101976         13622         17         83.075           901139942         13581         17         109.142           719825942         14108         17         99.889           341077235         14370         17         86.327           404765952         14346         17         87.516           1113324941         14377         17         108.937           62166876         14339         17         86.453           541580850         14624         17         89.615           1030600502         14302         17         100.97           826632156         14709         17         95.937           730048434         14321         17         91.493           105078284         14714         17         82.219           355719596         14810         17         88.934	1205746199	7162	15	21.948
1599313552         8291         16         27.542           1545788653         8549         16         26.454           1980276517         9225         17         35.133           1960340414         9477         16         34.09           49101976         13622         17         83.075           901139942         13581         17         109.142           719825942         14108         17         99.889           341077235         14370         17         86.327           404765952         14346         17         87.516           1113324941         14377         17         108.937           62166876         14339         17         86.453           541580850         14624         17         89.615           1030600502         14302         17         100.97           826632156         14709         17         95.937           730048434         14321         17         91.493           105078284         14714         17         82.219           355719596         14810         17         88.934           595881664         14978         17         108.211				
1545788653         8549         16         26.454           1980276517         9225         17         35.133           1960340414         9477         16         34.09           49101976         13622         17         83.075           901139942         13581         17         109.142           719825942         14108         17         99.889           341077235         14370         17         86.327           404765952         14346         17         87.516           1113324941         14377         17         108.937           62166876         14339         17         86.453           541580850         14624         17         89.615           1030600502         14302         17         100.97           826632156         14709         17         95.937           730048434         14321         17         93.728           640192302         14602         17         91.493           105078284         14714         17         82.219           355719596         14810         17         88.934           595881664         14978         17         93.43				
1980276517         9225         17         35.133           1960340414         9477         16         34.09           49101976         13622         17         83.075           901139942         13581         17         109.142           719825942         14108         17         99.889           341077235         14370         17         86.327           404765952         14346         17         87.516           1113324941         14377         17         108.937           62166876         14339         17         86.453           541580850         14624         17         89.615           1030600502         14302         17         100.97           826632156         14709         17         95.937           730048434         14321         17         93.728           640192302         14602         17         91.493           105078284         14714         17         82.219           355719596         14810         17         88.934           595881664         14978         17         108.211           552202616         14852         17         88.934				
1960340414         9477         16         34.09           49101976         13622         17         83.075           901139942         13581         17         109.142           719825942         14108         17         99.889           341077235         14370         17         86.327           404765952         14346         17         87.516           1113324941         14377         17         108.937           62166876         14339         17         86.453           541580850         14624         17         89.615           1030600502         14302         17         100.97           826632156         14709         17         95.937           730048434         14321         17         93.728           640192302         14602         17         91.493           105078284         14714         17         82.219           355719596         14810         17         88.934           595881664         14978         17         108.211           552202616         14852         17         86.609           456011161         15007         17         92.537				
901139942         13581         17         109.142           719825942         14108         17         99.889           341077235         14370         17         86.327           404765952         14346         17         87.516           1113324941         14377         17         108.937           62166876         14339         17         86.453           541580850         14624         17         89.615           1030600502         14302         17         100.97           826632156         14709         17         95.937           730048434         14321         17         93.728           640192302         14602         17         91.493           105078284         14714         17         82.219           355719596         14810         17         88.291           1370697327         14927         17         108.211           552202616         14852         17         88.934           595881664         14978         17         93.43           300237943         14975         17         86.609           456011161         15007         17         92.537 <t< td=""><td></td><td></td><td></td><td></td></t<>				
719825942         14108         17         99.889           341077235         14370         17         86.327           404765952         14346         17         87.516           1113324941         14377         17         108.937           62166876         14339         17         86.453           541580850         14624         17         89.615           1030600502         14302         17         100.97           826632156         14709         17         95.937           730048434         14321         17         93.728           640192302         14602         17         91.493           105078284         14714         17         82.219           355719596         14810         17         88.291           1370697327         14927         17         108.211           552202616         14852         17         88.934           595881664         14978         17         93.43           300237943         14975         17         86.609           456011161         15007         17         92.537           807311429         15148         17         98.915 <tr< td=""><td>49101976</td><td>13622</td><td>17</td><td>83.075</td></tr<>	49101976	13622	17	83.075
341077235         14370         17         86.327           404765952         14346         17         87.516           1113324941         14377         17         108.937           62166876         14339         17         86.453           541580850         14624         17         89.615           1030600502         14302         17         100.97           826632156         14709         17         95.937           730048434         14321         17         93.728           640192302         14602         17         91.493           105078284         14714         17         82.219           355719596         14810         17         88.291           1370697327         14927         17         108.211           552202616         14852         17         88.934           300237943         14978         17         93.43           300237943         14975         17         86.609           456011161         15007         17         92.537           807311429         15148         17         98.915           2085181955         15078         17         130.192      <	901139942	13581	17	109.142
404765952         14346         17         87.516           1113324941         14377         17         108.937           62166876         14339         17         86.453           541580850         14624         17         89.615           1030600502         14302         17         100.97           826632156         14709         17         95.937           730048434         14321         17         93.728           640192302         14602         17         91.493           105078284         14714         17         82.219           355719596         14810         17         88.291           1370697327         14927         17         108.211           552202616         14852         17         88.934           300237943         14978         17         93.43           300237943         14975         17         86.609           456011161         15007         17         92.537           807311429         15148         17         98.915           2085181955         15078         17         130.192           940518875         15054         17         97.063      <				
1113324941         14377         17         108.937           62166876         14339         17         86.453           541580850         14624         17         89.615           1030600502         14302         17         100.97           826632156         14709         17         95.937           730048434         14321         17         93.728           640192302         14602         17         91.493           105078284         14714         17         82.219           35571956         14810         17         88.291           1370697327         14927         17         108.211           552202616         14852         17         88.934           390237943         14978         17         93.43           300237943         14975         17         86.609           456011161         15007         17         92.537           807311429         15148         17         98.915           2085181955         15078         17         130.192           940518875         15054         17         97.063           729289901         15078         17         95.842 <t< td=""><td></td><td></td><td></td><td></td></t<>				
62166876         14339         17         86.453           541580850         14624         17         89.615           1030600502         14302         17         100.97           826632156         14709         17         95.937           730048434         14321         17         93.728           640192302         14602         17         91.493           105078284         14714         17         82.219           355719596         14810         17         88.291           1370697327         14927         17         108.211           552202616         14852         17         88.934           595881664         14978         17         93.43           300237943         14975         17         86.609           456011161         15007         17         92.537           807311429         15148         17         98.915           2085181955         15078         17         130.192           940518875         15054         17         97.063           729289901         15078         17         95.842           1642566971         15316         17         115.369      <				
541580850         14624         17         89.615           1030600502         14302         17         100.97           826632156         14709         17         95.937           730048434         14321         17         93.728           640192302         14602         17         91.493           105078284         14714         17         82.219           355719596         14810         17         88.291           1370697327         14927         17         108.211           552202616         14852         17         88.934           595881664         14978         17         93.43           300237943         14975         17         86.609           456011161         15007         17         92.537           807311429         15148         17         98.915           2085181955         15078         17         130.192           940518875         15054         17         97.063           729289901         15078         17         95.842           1642566971         15316         17         115.369           1299913981         15508         17         106.819 </td <td></td> <td></td> <td></td> <td></td>				
1030600502         14302         17         100.97           826632156         14709         17         95.937           730048434         14321         17         93.728           640192302         14602         17         91.493           105078284         14714         17         82.219           355719596         14810         17         88.291           1370697327         14927         17         108.211           552202616         14852         17         88.934           595881664         14978         17         93.43           300237943         14975         17         86.609           456011161         15007         17         92.537           807311429         15148         17         98.915           2085181955         15078         17         130.192           940518875         15054         17         97.063           729289901         15078         17         95.842           1642566971         15316         17         115.369           1299913981         15508         17         106.819				
730048434         14321         17         93.728           640192302         14602         17         91.493           105078284         14714         17         82.219           355719596         14810         17         88.291           1370697327         14927         17         108.211           552202616         14852         17         88.934           595881664         14978         17         93.43           300237943         14975         17         86.609           456011161         15007         17         92.537           807311429         15148         17         98.915           2085181955         15078         17         130.192           940518875         15054         17         97.063           72928901         15078         17         95.842           1642566971         15316         17         115.369           1299913981         15508         17         106.819				
640192302         14602         17         91.493           105078284         14714         17         82.219           355719596         14810         17         88.291           1370697327         14927         17         108.211           552202616         14852         17         88.934           595881664         14978         17         93.43           300237943         14975         17         86.609           456011161         15007         17         92.537           807311429         15148         17         98.915           2085181955         15078         17         130.192           940518875         15054         17         97.063           729289901         15078         17         95.842           1642566971         15316         17         115.369           1299913981         15508         17         106.819	826632156	14709	17	95.937
105078284         14714         17         82.219           355719596         14810         17         88.291           1370697327         14927         17         108.211           552202616         14852         17         88.934           595881664         14978         17         93.43           300237943         14975         17         86.609           456011161         15007         17         92.537           807311429         15148         17         98.915           2085181955         15078         17         130.192           940518875         15054         17         97.063           729289901         15078         17         95.842           1642566971         15316         17         115.369           1299913981         15508         17         106.819	730048434	14321	17	93.728
355719596         14810         17         88.291           1370697327         14927         17         108.211           552202616         14852         17         88.934           595881664         14978         17         93.43           300237943         14975         17         86.609           456011161         15007         17         92.537           807311429         15148         17         98.915           2085181955         15078         17         130.192           940518875         15054         17         97.063           729289901         15078         17         95.842           1642566971         15316         17         115.369           1299913981         15508         17         106.819				
1370697327         14927         17         108.211           552202616         14852         17         88.934           595881664         14978         17         93.43           300237943         14975         17         86.609           456011161         15007         17         92.537           807311429         15148         17         98.915           2085181955         15078         17         130.192           940518875         15054         17         97.063           729289901         15078         17         95.842           1642566971         15316         17         115.369           1299913981         15508         17         106.819				
552202616         14852         17         88.934           595881664         14978         17         93.43           300237943         14975         17         86.609           456011161         15007         17         92.537           807311429         15148         17         98.915           2085181955         15078         17         130.192           940518875         15054         17         97.063           729289901         15078         17         95.842           1642566971         15316         17         115.369           1299913981         15508         17         106.819				
595881664         14978         17         93.43           300237943         14975         17         86.609           456011161         15007         17         92.537           807311429         15148         17         98.915           2085181955         15078         17         130.192           940518875         15054         17         97.063           729289901         15078         17         95.842           1642566971         15316         17         115.369           1299913981         15508         17         106.819				
456011161         15007         17         92.537           807311429         15148         17         98.915           2085181955         15078         17         130.192           940518875         15054         17         97.063           729289901         15078         17         95.842           1642566971         15316         17         115.369           1299913981         15508         17         106.819	595881664		17	93.43
807311429         15148         17         98.915           2085181955         15078         17         130.192           940518875         15054         17         97.063           729289901         15078         17         95.842           1642566971         15316         17         115.369           1299913981         15508         17         106.819	300237943	14975	17	
2085181955         15078         17         130.192           940518875         15054         17         97.063           729289901         15078         17         95.842           1642566971         15316         17         115.369           1299913981         15508         17         106.819				
940518875         15054         17         97.063           729289901         15078         17         95.842           1642566971         15316         17         115.369           1299913981         15508         17         106.819				
729289901         15078         17         95.842           1642566971         15316         17         115.369           1299913981         15508         17         106.819				
1642566971         15316         17         115.369           1299913981         15508         17         106.819				
	1642566971	15316		
<b>■</b> 500/11028   15521   47   00.540	1299913981	15508	17	106.819
	500411938	15521	17	86.519
1327679812 15443 17 112.573				
877520623         15196         17         96.428           1651991947         15284         17         113.353				
1828452089 15138 17 118.457				
1935162708 15260 17 121.253				
1333021617 15364 17 105.524	1333021617	15364	17	105.524
1469868450 15501 17 108.373				
1113310398 15520 17 100.579				
1309616607         15593         17         104.189           626162677         15656         17         89.34				
1365337486 15474 17 106.297				
1242918703 15563 17 103.158				
961450865 15405 17 96.925	961450865	15405	17	96.925
1371793781 15489 17 106.027				
758624456 15701 17 94.301				
1214851117         15756         17         102.349           1887206850         15664         17         117.841				
1350952642 15670 17 109.828				
1438451835 15844 17 109.835				
1794522058 15851 17 121.048	1794522058	15851	17	121.048
1731699024 15636 17 119.012				
910724988 15443 17 98.848				
1494782552 15671 17 108.689				
2063457680         16051         17         127.549           1658717408         16080         17         117.898				
1144018270 15709 17 104.876				
735660893 15661 17 95.03				
998470564 16004 17 626.668	998470564	16004	17	
1753726270 15736 18 117.037	1753726270	15736	18	117.037

## **Graphs**









