

ソートベンチマーク

重複なし・乱数データ(実行時間:秒)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
mmsSort (Half memory)	安定	0.000143	0.000462	0.006509	0.024932	0.254249	3.488872	1.000
mmsSort (dual pivot stable Sort)	安定	0.000092	0.000387	0.004935	0.020094	0.246379	3.590880	1.029
MatSort(1/5)	安定	0.000167	0.000558	0.007103	0.021026	0.291401	3.804887	1.091
mmSort		0.000097	0.000295	0.007114	0.040393	0.265272	3.856092	1.105
MasSort	安定	0.000090	0.000291	0.006637	0.031598	0.285849	3.942743	1.130
Many Pivot Sort		0.000123	0.000411	0.005474	0.031271	0.276671	3.994263	1.145
Merge Sort	安定	0.000045	0.000544	0.007609	0.022785	0.287718	4.024638	1.154
Quick Sort (Median of 5)		0.000090	0.000306	0.003567	0.038672	0.274150	4.043866	1.159
Quick Sort (Median of 3)		0.000088	0.000297	0.002823	0.019557	0.257577	4.045607	1.160
Quick Sort (3 Way & Median of 5)		0.000086	0.000300	0.003561	0.026658	0.259480	4.185958	1.200
MatMasSort(1/5)	安定	0.000138	0.000405	0.011607	0.031266	0.305154	4.190659	1.201
Arrays.sort	安定	0.000097	0.000452	0.005841	0.028225	0.329953	4.617790	1.324

文字列・重複なし・乱数データ(実行時間:秒)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
mmsSort (dual pivot stable Sort)	安定	0.000119	0.000598	0.012579	0.068992	1.012211	15.184841	1.000
Many Pivot Sort		0.000140	0.000599	0.012755	0.071236	1.085605	15.204115	1.001
MasSort	安定	0.000100	0.000521	0.013087	0.070598	1.067199	15.460947	1.018
mmsSort (Half memory)	安定	0.000146	0.000668	0.011569	0.071877	1.068263	15.603292	1.028
mmSort		0.000119	0.000481	0.011590	0.072274	1.031321	15.658005	1.031
MatSort(1/5)	安定	0.000154	0.000826	0.009962	0.069999	1.078367	15.969632	1.052
Merge Sort	安定	0.000069	0.000787	0.012152	0.065025	1.019687	16.155097	1.064
Quick Sort (Median of 5)		0.000117	0.000551	0.012955	0.070387	1.098707	16.366691	1.078
MatMasSort(1/5)	安定	0.000171	0.000670	0.013671	0.075594	1.092278	16.467106	1.084
Quick Sort (3 Way & Median of 5)		0.000122	0.000473	0.007155	0.066208	1.034097	16.480055	1.085
Quick Sort (Median of 3)		0.000106	0.000548	0.009862	0.065397	1.157778	17.115619	1.127
Arrays.sort	安定	0.000122	0.000634	0.010586	0.075298	1.183370	17.714332	1.167

乱数データ(重複:10個ずつ)(実行時間:秒)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
mmsSort (dual pivot stable Sort)	安定	0.000080	0.000239	0.006077	0.025963	0.226141	3.329021	1.000
mmsSort (Half memory)	安定	0.000114	0.000433	0.004654	0.025454	0.244939	3.436998	1.032
MatSort(1/5)	安定	0.000123	0.000488	0.005441	0.025511	0.275747	3.717042	1.117
Many Pivot Sort		0.000099	0.000397	0.007267	0.032889	0.251318	3.718940	1.117
MasSort	安定	0.000083	0.000292	0.005790	0.025208	0.261635	3.779106	1.135
mmSort		0.000079	0.000246	0.006583	0.037139	0.263393	3.798733	1.141
Quick Sort (Median of 5)		0.000087	0.000277	0.003439	0.033352	0.257597	3.931513	1.181
MatMasSort(1/5)	安定	0.000133	0.000403	0.006718	0.026657	0.278932	3.941433	1.184
Merge Sort	安定	0.000046	0.000582	0.007066	0.023184	0.281158	3.941484	1.184
Quick Sort (Median of 3)		0.000077	0.000283	0.003023	0.022953	0.253049	3.952569	1.187
Quick Sort (3 Way & Median of 5)		0.000076	0.000229	0.002609	0.030562	0.272110	4.038294	1.213
Arrays.sort	安定	0.000100	0.000433	0.006357	0.027482	0.316517	4.512978	1.356

乱数データ(重複:100個ずつ)(実行時間:秒)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
MatSort(1/5)	安定	(NULL)	0.000289	0.003325	0.021191	0.213706	3.022580	1.000
mmsSort (Half memory)	安定	(NULL)	0.000255	0.002661	0.024194	0.206632	3.035170	1.004
mmsSort (dual pivot stable Sort)	安定	(NULL)	0.000196	0.001846	0.019933	0.202594	3.073486	1.017
MatMasSort(1/5)	安定	(NULL)	0.000367	0.005554	0.024682	0.228760	3.224355	1.067
MasSort	安定	(NULL)	0.000262	0.006530	0.024633	0.232361	3.275941	1.084
Quick Sort (3 Way & Median of 5)		(NULL)	0.000173	0.001439	0.027949	0.228803	3.612206	1.195
Merge Sort	安定	(NULL)	0.000540	0.006494	0.020473	0.251636	3.619298	1.197
mmSort		(NULL)	0.000181	0.005850	0.033517	0.245203	3.655120	1.209
Arrays.sort	安定	(NULL)	0.000346	0.005623	0.024088	0.238252	3.674587	1.216
Many Pivot Sort		(NULL)	0.000323	0.004822	0.031911	0.246509	3.716504	1.230
Quick Sort (Median of 5)		(NULL)	0.000196	0.005292	0.026978	0.242078	3.756052	1.243
Quick Sort (Median of 3)		(NULL)	0.000207	0.002460	0.017128	0.231692	3.787283	1.253

乱数データ(重複:1000個ずつ)(実行時間:秒)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
Arrays.sort	安定	(NULL)	(NULL)	0.003876	0.018622	0.163739	2.315765	1.000
MatSort(1/5)	安定	(NULL)	(NULL)	0.001854	0.013832	0.172173	2.613369	1.129
mmsSort (Half memory)	安定	(NULL)	(NULL)	0.001734	0.016636	0.182259	2.756094	1.190
mmsSort (dual pivot stable Sort)	安定	(NULL)	(NULL)	0.001673	0.012480	0.173652	2.791524	1.205
MatMasSort(1/5)	安定	(NULL)	(NULL)	0.006971	0.021255	0.203677	2.815349	1.216
MasSort	安定	(NULL)	(NULL)	0.005351	0.023872	0.215023	2.943448	1.271
Quick Sort (3 Way & Median of 5)		(NULL)	(NULL)	0.000978	0.026393	0.198685	3.224296	1.392
Merge Sort	安定	(NULL)	(NULL)	0.005303	0.019139	0.230229	3.276303	1.415
mmSort		(NULL)	(NULL)	0.005900	0.042895	0.234235	3.471004	1.499
Quick Sort (Median of 5)		(NULL)	(NULL)	0.005254	0.033530	0.223241	3.552678	1.534
Many Pivot Sort		(NULL)	(NULL)	0.004827	0.026214	0.248323	3.565718	1.540
Quick Sort (Median of 3)		(NULL)	(NULL)	0.002000	0.017931	0.215320	3.622945	1.564

乱数データ(重複:10000個ずつ)(実行時間:秒)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
Arrays.sort	安定	(NULL)	(NULL)	(NULL)	0.013673	0.118798	1.640672	1.000
MatSort(1/5)	安定	(NULL)	(NULL)	(NULL)	0.011287	0.132903	2.254454	1.374
mmsSort (dual pivot stable Sort)	安定	(NULL)	(NULL)	(NULL)	0.010170	0.126751	2.282332	1.391
mmsSort (Half memory)	安定	(NULL)	(NULL)	(NULL)	0.009163	0.139468	2.308453	1.407
Quick Sort (3 Way & Median of 5)		(NULL)	(NULL)	(NULL)	0.022031	0.154295	2.604483	1.587
MatMasSort(1/5)	安定	(NULL)	(NULL)	(NULL)	0.020828	0.183337	2.611488	1.592
MasSort	安定	(NULL)	(NULL)	(NULL)	0.020272	0.199556	2.731661	1.665
Merge Sort	安定	(NULL)	(NULL)	(NULL)	0.017636	0.210478	3.041366	1.854
mmSort		(NULL)	(NULL)	(NULL)	0.041067	0.214968	3.338716	2.035
Quick Sort (Median of 5)		(NULL)	(NULL)	(NULL)	0.030178	0.205611	3.401927	2.073
Many Pivot Sort		(NULL)	(NULL)	(NULL)	0.029214	0.214611	3.426516	2.088
Quick Sort (Median of 3)		(NULL)	(NULL)	(NULL)	0.013246	0.194224	3.456766	2.107

乱数データ(重複:100000個ずつ)(実行時間:秒)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
Arrays.sort	安定	(NULL)	(NULL)	(NULL)	(NULL)	0.087807	1.162367	1.000
Quick Sort (3 Way & Median of 5)		(NULL)	(NULL)	(NULL)	(NULL)	0.099606	1.601823	1.378
mmsSort (dual pivot stable Sort)	安定	(NULL)	(NULL)	(NULL)	(NULL)	0.083719	1.627534	1.400
MatSort(1/5)	安定	(NULL)	(NULL)	(NULL)	(NULL)	0.092245	1.767958	1.521
mmsSort (Half memory)	安定	(NULL)	(NULL)	(NULL)	(NULL)	0.097063	1.830266	1.575
MatMasSort(1/5)	安定	(NULL)	(NULL)	(NULL)	(NULL)	0.160488	2.453602	2.111
MasSort	安定	(NULL)	(NULL)	(NULL)	(NULL)	0.172500	2.622786	2.256
Merge Sort	安定	(NULL)	(NULL)	(NULL)	(NULL)	0.182659	2.815478	2.422
mmSort		(NULL)	(NULL)	(NULL)	(NULL)	0.195800	2.974225	2.559
Quick Sort (Median of 3)		(NULL)	(NULL)	(NULL)	(NULL)	0.171915	3.047584	2.622
Quick Sort (Median of 5)		(NULL)	(NULL)	(NULL)	(NULL)	0.189773	3.106970	2.673
Many Pivot Sort		(NULL)	(NULL)	(NULL)	(NULL)	0.198617	3.132800	2.695

乱数データ(重複:1000000個ずつ)(実行時間:秒)

[illegible]

ソートベンチマーク

前半ソート済み・後半乱数(実行時間:秒)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
MasSort	安定	0.000066	0.000215	0.003151	0.018761	0.152901	2.095508	1.000
Merge Sort	安定	0.000038	0.000298	0.003638	0.015142	0.156543	2.101318	1.003
mmsSort (dual pivot stable Sort)	安定	0.000075	0.000237	0.005599	0.027208	0.161750	2.125671	1.014
MatMasSort(1/5)	安定	0.000116	0.000317	0.005770	0.020772	0.164892	2.185222	1.043
mmsSort (Half memory)	安定	0.000107	0.000357	0.005737	0.018439	0.176720	2.235037	1.067
MatSort(1/5)	安定	0.000127	0.000472	0.004555	0.021238	0.180934	2.369902	1.131
Arrays.sort	安定	0.000069	0.000348	0.004209	0.019729	0.178456	2.372028	1.132
Many Pivot Sort		0.000108	0.000405	0.005455	0.032990	0.194336	2.622332	1.251
mmSort		0.000079	0.000228	0.005895	0.040081	0.197921	2.633434	1.257
Quick Sort (Median of 3)		0.000073	0.000276	0.002431	0.018173	0.187307	2.831935	1.351
Quick Sort (Median of 5)		0.000078	0.000254	0.004829	0.031230	0.196522	2.835559	1.353
Quick Sort (3 Way & Median of 5)		0.000068	0.000207	0.002299	0.033905	0.210345	2.898044	1.383

ソート済み(実行時間:秒)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
Arrays.sort	安定	0.000040	0.000085	0.000269	0.000783	0.006986	0.059187	1.000
Merge Sort	安定	0.000015	0.000041	0.000130	0.000818	0.010192	0.084018	1.420
MasSort	安定	0.000025	0.000057	0.000161	0.000844	0.009652	0.096614	1.632
MatMasSort(1/5)	安定	0.000076	0.000159	0.000521	0.002590	0.017905	0.170328	2.878
Quick Sort (Median of 3)		0.000060	0.000155	0.002101	0.009097	0.060740	0.746770	12.617
Quick Sort (3 Way & Median of 5)		0.000064	0.000148	0.001163	0.029770	0.080964	0.816922	13.802
MatSort(1/5)	安定	0.000099	0.000238	0.005462	0.020403	0.077421	0.845373	14.283
mmsSort (Half memory)	安定	0.000102	0.000215	0.004805	0.015499	0.081345	0.856106	14.464
Many Pivot Sort		0.000104	0.000285	0.004989	0.029512	0.084071	0.863684	14.592
mmSort		0.000082	0.000196	0.004716	0.032972	0.101701	0.891342	15.060
Quick Sort (Median of 5)		0.000065	0.000210	0.002288	0.033062	0.096425	0.902770	15.253
mmsSort (dual pivot stable Sort)	安定	0.000069	0.000198	0.006118	0.018024	0.086561	0.930289	15.718

逆順ソート済み(実行時間:秒)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
Arrays.sort	安定	0.000083	0.000252	0.001363	0.007176	0.037782	0.314255	1.000
Quick Sort (Median of 3)		0.000057	0.000162	0.001264	0.012408	0.070049	0.779542	2.481
Quick Sort (3 Way & Median of 5)		0.000064	0.000157	0.001383	0.027054	0.078997	0.837257	2.664
Many Pivot Sort		0.000104	0.000318	0.003771	0.028317	0.087568	0.880689	2.802
MatSort(1/5)	安定	0.000107	0.000236	0.003456	0.021116	0.085854	0.904140	2.877
mmSort		0.000082	0.000192	0.004511	0.036535	0.104282	0.913344	2.906
Quick Sort (Median of 5)		0.000073	0.000217	0.004259	0.035007	0.099801	0.936664	2.981
mmsSort (dual pivot stable Sort)	安定	0.000081	0.000209	0.005508	0.023619	0.094367	0.951816	3.029
mmsSort (Half memory)	安定	0.000109	0.000268	0.005205	0.022794	0.094777	1.002142	3.189
MatMasSort(1/5)	安定	0.000109	0.000243	0.004587	0.013334	0.091765	1.025711	3.264
MasSort	安定	0.000079	0.000223	0.003858	0.019332	0.092836	1.112958	3.542
Merge Sort	安定	0.000036	0.000311	0.006145	0.013938	0.102494	1.225045	3.898

全て同値(実行時間:秒)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
Quick Sort (3 Way & Median of 5)		0.000046	0.000088	0.000274	0.000876	0.006782	0.059585	1.000
Arrays.sort	安定	0.000038	0.000083	0.000262	0.000766	0.007171	0.059610	1.000
Merge Sort	安定	0.000017	0.000045	0.000126	0.000799	0.010294	0.080851	1.357
MasSort	安定	0.000028	0.000059	0.000165	0.000804	0.009287	0.095752	1.607
mmsSort (Half memory)	安定	0.000079	0.000129	0.000372	0.001377	0.013493	0.131330	2.204
mmsSort (dual pivot stable Sort)	安定	0.000048	0.000105	0.000366	0.001407	0.014019	0.131418	2.206
MatMasSort(1/5)	安定	0.000075	0.000155	0.000523	0.002616	0.018035	0.167015	2.803
MatSort(1/5)	安定	0.000099	0.000187	0.000764	0.002934	0.023140	0.211807	3.555
mmSort		0.000068	0.000226	0.005567	0.013638	0.075634	0.894740	15.016
Many Pivot Sort		0.000094	0.000354	0.003643	0.008977	0.079046	0.970405	16.286
Quick Sort (Median of 5)		0.000075	0.000180	0.003158	0.009614	0.076361	0.973091	16.331
Quick Sort (Median of 3)		0.000067	0.000165	0.004107	0.016059	0.082905	1.033973	17.353

ソートベンチマーク
重複なし・乱数データ(比較回数)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
Arrays.sort	安定	539.3	8686.7	120394.7	1534810.1	18640613.2	220246798.2	1.000
Merge Sort	安定	573.1	9116.7	124092.5	1567838.8	19069889.1	223782968.9	1.016
MatMasSort(1/5)	安定	593.9	9408.3	128808.9	1632357.0	19795442.1	232695310.7	1.057
MasSort	安定	581.8	9243.4	127365.0	1620472.2	19805798.7	233971201.4	1.062
mmSort		707.3	10551.7	142204.2	1801598.2	21712309.9	255390482.4	1.160
Many Pivot Sort		789.9	11597.4	153531.2	1905886.5	22370284.9	257405640.7	1.169
mmsSort (Half memory)	安定	763.6	11377.5	150860.4	1869337.5	22352117.8	258600429.0	1.174
MatSort(1/5)	安定	725.0	11471.3	151192.8	1873381.5	22313808.0	258976194.3	1.176
mmsSort (dual pivot stable Sort)	安定	779.6	11590.5	151965.2	1880176.1	22382845.9	259672322.0	1.179
Quick Sort (3 Way & Median of 5)		741.9	11013.3	146908.9	1844137.7	22210515.9	260301524.1	1.182
Quick Sort (Median of 5)		789.9	11752.2	156327.2	1961168.4	23553488.2	274983596.5	1.249
Quick Sort (Median of 3)		760.2	11845.3	158892.9	2012261.9	24300278.3	282967442.2	1.285

文字列・重複なし・乱数データ(比較回数)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
Arrays.sort	安定	539.3	8686.7	120394.7	1534810.1	18640613.2	220246798.2	1.000
Merge Sort	安定	573.1	9116.7	124092.5	1567838.8	19069889.1	223782968.9	1.016
MatMasSort(1/5)	安定	593.9	9408.3	128808.9	1632357.0	19795442.1	232695310.7	1.057
MasSort	安定	581.8	9243.4	127365.0	1620472.2	19805798.7	233971201.4	1.062
mmSort		707.3	10551.7	142204.2	1801598.2	21712309.9	255390482.4	1.160
Many Pivot Sort		789.9	11597.4	153531.2	1905886.5	22370284.9	257405640.7	1.169
mmsSort (Half memory)	安定	763.6	11377.5	150860.4	1869337.5	22352117.8	258600429.0	1.174
MatSort(1/5)	安定	725.0	11471.3	151192.8	1873381.5	22313808.0	258976194.3	1.176
mmsSort (dual pivot stable Sort)	安定	779.6	11590.5	151965.2	1880176.1	22382845.9	259672322.0	1.179
Quick Sort (3 Way & Median of 5)		741.9	11013.3	146908.9	1844137.7	22210515.9	260301524.1	1.182
Quick Sort (Median of 5)		789.9	11752.2	156327.2	1961168.4	23553488.2	274983596.5	1.249
Quick Sort (Median of 3)		760.2	11845.3	158892.9	2012261.9	24300278.3	282967442.2	1.285

乱数データ(重複:10)(比較回数)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
Quick Sort (3 Way & Median of 5)		367.8	6816.8	104568.2	1417081.7	17944930.0	216490378.0	1.000
Arrays.sort	安定	531.2	8682.9	120397.5	1534811.3	18640618.4	220246805.2	1.017
Merge Sort	安定	565.8	9110.7	124083.8	1567832.7	19069884.1	223782964.5	1.034
MasSort	安定	529.7	8764.3	122645.6	1573563.5	19337140.9	229285260.8	1.059
mmsSort (dual pivot stable Sort)	安定	502.9	8841.9	123450.1	1591901.1	19530806.7	231035218.5	1.067
MatMasSort(1/5)	安定	600.0	9485.7	129656.7	1640876.9	19880202.0	233539862.9	1.079
mmSort		555.6	9319.1	129975.8	1672750.1	20486917.0	242936999.6	1.122
Many Pivot Sort		640.5	10240.6	139446.1	1764798.8	20967960.9	243303464.8	1.124
mmsSort (Half memory)	安定	605.3	10078.9	136139.2	1728981.9	20881892.5	244369459.6	1.129
MatSort(1/5)	安定	676.0	11069.3	147528.4	1836065.0	21960308.8	255162488.0	1.179
Quick Sort (Median of 5)		640.5	10433.0	142999.1	1816277.0	22118984.8	260772839.5	1.205
Quick Sort (Median of 3)		610.0	10408.3	145116.1	1853877.0	22810884.3	267325671.4	1.235

乱数データ(重複:100)(比較回数)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
Quick Sort (3 Way & Median of 5)		(NULL)	3103.7	63807.6	1002796.1	13876324.7	175100000.3	1.000
mmsSort (dual pivot stable Sort)	安定	(NULL)	4845.7	85171.9	1214362.2	15687906.7	193259065.7	1.104
mmsSort (Half memory)	安定	(NULL)	5732.3	93873.2	1301911.4	16660333.4	202124177.3	1.154
Arrays.sort	安定	(NULL)	6847.2	103260.1	1367646.1	16931436.1	205228969.3	1.172
MatSort(1/5)	安定	(NULL)	6839.7	104749.0	1411158.2	17705511.1	212804518.5	1.215
MasSort	安定	(NULL)	7384.5	109606.2	1444224.5	18043950.5	216354217.3	1.236
MatMasSort(1/5)	安定	(NULL)	7979.9	115308.0	1498412.4	18457306.9	219312953.3	1.253
Many Pivot Sort		(NULL)	8219.4	119613.8	1564463.2	18948278.8	223210292.8	1.275
Merge Sort	安定	(NULL)	8912.7	123884.9	1567627.7	19069706.5	223782762.7	1.278
mmSort		(NULL)	7623.2	113270.2	1511755.7	18874308.2	226685800.3	1.295
Quick Sort (Median of 5)		(NULL)	8317.8	121734.8	1604224.3	20152223.3	241102873.2	1.377
Quick Sort (Median of 3)		(NULL)	8425.3	125989.8	1667610.3	20609825.9	248300242.1	1.418

乱数データ(重複:1000)(比較回数)

乱数データ(重複:10000)(比較回数)

乱数データ(重複:100000)(比較回数)

乱数データ(重複:1000000)(比較回数)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
Quick Sort (3 Way & Median of 5)		(NULL)	(NULL)	(NULL)	(NULL)	(NULL)	30850072.5	1.000
mmsSort (dual pivot stable Sort)	安定	(NULL)	(NULL)	(NULL)	(NULL)	(NULL)	47050282.4	1.525
mmsSort (Half memory)	安定	(NULL)	(NULL)	(NULL)	(NULL)	(NULL)	55625062.3	1.803
MatSort(1/5)	安定	(NULL)	(NULL)	(NULL)	(NULL)	(NULL)	62732053.9	2.033
Arrays.sort	安定	(NULL)	(NULL)	(NULL)	(NULL)	(NULL)	71986857.7	2.333
MasSort	安定	(NULL)	(NULL)	(NULL)	(NULL)	(NULL)	156866248.3	5.085
MatMasSort(1/5)	安定	(NULL)	(NULL)	(NULL)	(NULL)	(NULL)	156925555.2	5.087
mmSort		(NULL)	(NULL)	(NULL)	(NULL)	(NULL)	207653703.6	6.731
Many Pivot Sort		(NULL)	(NULL)	(NULL)	(NULL)	(NULL)	211131318.8	6.844
Quick Sort (Median of 5)		(NULL)	(NULL)	(NULL)	(NULL)	(NULL)	213997092.5	6.937
Merge Sort	安定	(NULL)	(NULL)	(NULL)	(NULL)	(NULL)	215141189.8	6.974
Quick Sort (Median of 3)		(NULL)	(NULL)	(NULL)	(NULL)	(NULL)	216417355.5	7.015

ソートベンチマーク
前半ソート済み・後半乱数(比較回数)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
Arrays.sort	安定	364.6	5333.2	70195.9	867407.1	10320312.6	120123919.1	1.000
Merge Sort	安定	383.4	5553.7	72053.5	884069.3	10535033.6	121891719.4	1.015
MasSort	安定	398.1	5786.6	75763.2	934395.5	11051453.0	127600041.5	1.062
MatMasSort(1/5)	安定	465.7	6334.6	81025.8	977436.7	11560035.6	133419178.1	1.111
Quick Sort (3 Way & Median of 5)		367.1	6699.6	102782.3	1405355.1	17805845.2	215693328.9	1.796
mmsSort (dual pivot stable Sort)	安定	476.9	8504.5	120646.2	1549566.9	18984037.7	224381157.0	1.868
mmsSort (Half memory)	安定	570.9	9492.5	128463.5	1632099.3	19809756.1	232669479.1	1.937
MatSort(1/5)	安定	556.9	9745.0	132162.9	1663654.4	20111126.4	235868813.3	1.964
mmSort		538.2	9189.0	128573.5	1650450.7	20122232.8	238733669.2	1.987
Many Pivot Sort		616.8	10048.1	136342.7	1723453.5	20601907.6	239636632.7	1.995
Quick Sort (Median of 5)		616.8	10124.8	140571.6	1789876.4	21726013.3	257222480.4	2.141
Quick Sort (Median of 3)		634.2	10458.5	146940.4	1904560.5	22668084.2	270673125.6	2.253

ソート済み(比較回数)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
Merge Sort	安定	99.0	999.0	9999.0	99999.0	999999.0	9999999.0	1.000
Arrays.sort	安定	99.0	999.0	9999.0	99999.0	999999.0	9999999.0	1.000
MasSort	安定	118.0	1267.0	13201.0	137559.0	1189223.0	10136712.0	1.014
MatMasSort(1/5)	安定	264.0	2654.0	27204.0	261584.0	2714264.0	28028384.0	2.803
Quick Sort (3 Way & Median of 5)		317.0	6281.0	93556.0	1282023.0	16187089.0	193365904.0	19.337
mmsSort (Half memory)	安定	325.0	7165.0	105081.0	1357919.0	17179901.0	205463195.0	20.546
MatSort(1/5)	安定	329.0	6774.0	108454.0	1410024.0	17179909.0	207801164.0	20.780
Quick Sort (Median of 3)		443.0	7993.0	112733.0	1466133.0	17989253.0	212514213.0	21.251
mmsSort (dual pivot stable Sort)	安定	391.0	8297.0	115019.0	1458001.0	18180258.0	215463371.0	21.546
Many Pivot Sort		535.0	8963.0	124008.0	1612242.0	19076864.0	224646910.0	22.465
mmSort		516.0	8328.0	121732.0	1590835.0	19529753.0	232743309.0	23.274
Quick Sort (Median of 5)		535.0	9453.0	132326.0	1701864.0	20839611.0	246234844.0	24.623

逆順ソート済み(比較回数)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
Arrays.sort	安定	411.0	4338.0	41215.0	421964.0	4306436.0	41249953.0	1.000
MatMasSort(1/5)	安定	334.0	4175.0	57059.0	683179.0	8322705.0	97993859.0	2.376
MasSort	安定	369.0	5149.0	65653.0	792635.0	9263783.0	105935654.0	2.568
Merge Sort	安定	396.0	5730.0	74614.0	907446.0	10738262.0	124135094.0	3.009
Quick Sort (3 Way & Median of 5)		316.0	6280.0	93555.0	1282022.0	16187088.0	193365903.0	4.688
MatSort(1/5)	安定	264.0	6840.0	99359.0	1318839.0	16784790.0	198811124.0	4.820
Quick Sort (Median of 3)		421.0	7971.0	112711.0	1466111.0	17989231.0	212514191.0	5.152
mmsSort (Half memory)	安定	416.0	8330.0	117018.0	1528426.0	18381500.0	215870190.0	5.233
mmsSort (dual pivot stable Sort)	安定	462.0	8718.0	122012.0	1578263.0	18880785.0	220870176.0	5.354
Many Pivot Sort		512.0	9035.0	124127.0	1612205.0	19076939.0	224647180.0	5.446
mmSort		485.0	8482.0	120034.0	1556424.0	19418648.0	230854215.0	5.596
Quick Sort (Median of 5)		512.0	9396.0	132588.0	1701320.0	20815054.0	246200776.0	5.969

全て同値(比較回数)

アルゴリズム	安定	100	1000	10000	100000	1000000	10000000	RATIO
Merge Sort		99.0	999.0	9999.0	99999.0	999999.0	9999999.0	1.000
Arrays.sort	安定	99.0	999.0	9999.0	99999.0	999999.0	9999999.0	1.000
Quick Sort (3 Way & Median of 5)		105.0	1005.0	10005.0	100005.0	1000005.0	10000005.0	1.000
mmsSort (dual pivot stable Sort)	安定	105.0	1011.0	10011.0	100011.0	1000011.0	10000011.0	1.000
mmsSort (Half memory)	安定	111.0	1023.0	10023.0	100023.0	1000023.0	10000023.0	1.000
MasSort	安定	118.0	1267.0	13201.0	137559.0	1189223.0	10136712.0	1.014
MatSort(1/5)	安定	289.0	2639.0	26059.0	260059.0	2600059.0	26000059.0	2.600
MatMasSort(1/5)	安定	264.0	2654.0	27204.0	261584.0	2714264.0	28028384.0	2.803
mmSort		399.0	6983.0	99935.0	1395551.0	16979967.0	199862911.0	19.986
Many Pivot Sort		437.0	7308.0	112284.0	1443840.0	17354823.0	209118505.0	20.912
Quick Sort (Median of 5)		437.0	7345.0	112745.0	1445049.0	17360441.0	209938041.0	20.994
Quick Sort (Median of 3)		427.0	7283.0	114747.0	1436443.0	17307515.0	215067003.0	21.507