

ソートベンチマーク

乱数データ(実行時間)

| アルゴリズム | 安定 | 100 | 1000 | 10000 | 100000 | 1000000 | 10000000 | RATIO |
|----------------------------------|----|----------|----------|----------|----------|----------|----------|-------------|
| mmsSort (dual pivot stable Sort) | 安定 | 0.000175 | 0.000310 | 0.006040 | 0.034953 | 0.240084 | 3.406549 | 1 |
| mmsSort (Half memory) | 安定 | 0.000192 | 0.000473 | 0.003568 | 0.031807 | 0.258984 | 3.484698 | 1.022940812 |
| MatMmsSort(1/5) | 安定 | 0.000313 | 0.000493 | 0.006608 | 0.044305 | 0.291820 | 3.771844 | 1.107233156 |
| MasSort | 安定 | 0.000104 | 0.000367 | 0.010696 | 0.037227 | 0.280751 | 3.792268 | 1.113228666 |
| mmSort | | 0.000149 | 0.000299 | 0.005721 | 0.053321 | 0.290831 | 3.914458 | 1.149097811 |
| Quick Sort (3 Way & Median of 5) | | 0.000122 | 0.000312 | 0.006591 | 0.031272 | 0.304782 | 4.003185 | 1.175143819 |
| Quick Sort (Median of 5) | | 0.000124 | 0.000331 | 0.003468 | 0.053520 | 0.281666 | 4.038135 | 1.185403468 |
| Merge Sort | 安定 | 0.000060 | 0.000358 | 0.008972 | 0.030105 | 0.294680 | 4.064345 | 1.193097472 |
| Many Pivot Sort | | 0.000312 | 0.000525 | 0.006513 | 0.038318 | 0.296620 | 4.066891 | 1.193844856 |
| Quick Sort (Median of 3) | | 0.000124 | 0.000308 | 0.003831 | 0.022590 | 0.257269 | 4.075146 | 1.196268129 |
| MatSort(1/5) | 安定 | 0.000204 | 0.000526 | 0.007774 | 0.038856 | 0.308023 | 4.084028 | 1.19887546 |
| Arrays.Sort | 安定 | 0.000143 | 0.000617 | 0.005237 | 0.041916 | 0.335586 | 4.664239 | 1.369197684 |

文字列・乱数データ(実行時間)

| アルゴリズム | 安定 | 100 | 1000 | 10000 | 100000 | 1000000 | 10000000 | RATIO |
|----------------------------------|----|----------|----------|----------|----------|----------|-----------|-------------|
| MasSort | 安定 | 0.000142 | 0.000565 | 0.008832 | 0.078086 | 1.036753 | 15.193885 | 1 |
| mmsSort (dual pivot stable Sort) | 安定 | 0.000178 | 0.000552 | 0.008625 | 0.067824 | 1.023343 | 15.357945 | 1.010797765 |
| mmsSort (Half memory) | 安定 | 0.000249 | 0.000658 | 0.016875 | 0.089627 | 1.049394 | 15.413899 | 1.014480431 |
| Many Pivot Sort | | 0.000242 | 0.000676 | 0.015361 | 0.085462 | 1.107639 | 15.701201 | 1.033389485 |
| MatMmsSort(1/5) | 安定 | 0.000260 | 0.000742 | 0.008605 | 0.088445 | 1.125582 | 16.102460 | 1.059798728 |
| mmSort | | 0.000172 | 0.000555 | 0.011704 | 0.091743 | 1.062951 | 16.189171 | 1.065505695 |
| Quick Sort (3 Way & Median of 5) | | 0.000160 | 0.000525 | 0.011169 | 0.091438 | 1.060858 | 16.241388 | 1.068942407 |
| Merge Sort | 安定 | 0.000093 | 0.000531 | 0.012652 | 0.074021 | 1.088507 | 16.523548 | 1.087513036 |
| MatSort(1/5) | 安定 | 0.000246 | 0.000862 | 0.011123 | 0.087273 | 1.137546 | 16.568657 | 1.090481927 |
| Quick Sort (Median of 5) | | 0.000169 | 0.000547 | 0.011156 | 0.082962 | 1.136631 | 17.319757 | 1.139916289 |
| Quick Sort (Median of 3) | | 0.000172 | 0.000496 | 0.012080 | 0.075621 | 1.143907 | 17.548634 | 1.154980046 |
| Arrays.Sort | 安定 | 0.000153 | 0.000925 | 0.010312 | 0.084295 | 1.201692 | 18.266451 | 1.202223855 |

重複なし乱数データ(実行時間)

| アルゴリズム | 安定 | 100 | 1000 | 10000 | 100000 | 1000000 | 10000000 | RATIO |
|----------------------------------|----|----------|----------|----------|----------|----------|----------|-------------|
| mmsSort (dual pivot stable Sort) | 安定 | 0.000138 | 0.000401 | 0.007736 | 0.025104 | 0.262252 | 3.655145 | 1 |
| mmsSort (Half memory) | 安定 | 0.000217 | 0.000483 | 0.008576 | 0.027914 | 0.259433 | 3.725380 | 1.01921538 |
| MatMmsSort(1/5) | 安定 | 0.000239 | 0.000564 | 0.007527 | 0.033068 | 0.297969 | 3.843233 | 1.051458424 |
| mmSort | | 0.000127 | 0.000367 | 0.006030 | 0.054303 | 0.292443 | 3.942378 | 1.078583203 |
| Many Pivot Sort | | 0.000212 | 0.000502 | 0.004612 | 0.048904 | 0.303635 | 3.944677 | 1.079212179 |
| Quick Sort (3 Way & Median of 5) | | 0.000134 | 0.000348 | 0.008842 | 0.030504 | 0.262883 | 4.026442 | 1.101582017 |
| MasSort | 安定 | 0.000113 | 0.000371 | 0.007873 | 0.038666 | 0.303811 | 4.074715 | 1.11478888 |
| Quick Sort (Median of 3) | | 0.000151 | 0.000340 | 0.004366 | 0.027511 | 0.265039 | 4.126885 | 1.129061911 |
| Merge Sort | 安定 | 0.000073 | 0.000299 | 0.009320 | 0.030161 | 0.301499 | 4.139900 | 1.132622646 |
| Quick Sort (Median of 5) | | 0.000128 | 0.000337 | 0.004741 | 0.051482 | 0.310135 | 4.156458 | 1.137152698 |
| MatSort(1/5) | 安定 | 0.000211 | 0.000552 | 0.010940 | 0.040091 | 0.325283 | 4.320837 | 1.182124649 |
| Arrays.Sort | 安定 | 0.000123 | 0.000785 | 0.007078 | 0.043525 | 0.352856 | 4.765398 | 1.30375074 |

乱数データ(実行時間)

前半ソート済み・後半乱数(実行時間)

| アルゴリズム | 安定 | 100 | 1000 | 10000 | 100000 | 1000000 | 10000000 | RATIO |
|----------------------------------|----|----------|----------|----------|----------|----------|----------|-------------|
| Merge Sort | 安定 | 0.000048 | 0.000225 | 0.005078 | 0.026016 | 0.165166 | 2.132257 | 1 |
| mmsSort (dual pivot stable Sort) | 安定 | 0.000136 | 0.000327 | 0.004685 | 0.047443 | 0.171973 | 2.152764 | 1.009617509 |
| MasSort | 安定 | 0.000072 | 0.000303 | 0.002516 | 0.027135 | 0.173436 | 2.174297 | 1.019716197 |
| MatSort(1/5) | 安定 | 0.000188 | 0.000462 | 0.005973 | 0.027099 | 0.179113 | 2.265104 | 1.062303465 |
| mmsSort (Half memory) | 安定 | 0.000190 | 0.000447 | 0.006927 | 0.026998 | 0.200664 | 2.390381 | 1.121056702 |
| MatMmsSort(1/5) | 安定 | 0.000198 | 0.000484 | 0.002953 | 0.031051 | 0.201630 | 2.435835 | 1.14237402 |
| Arrays.Sort | 安定 | 0.000107 | 0.000473 | 0.002891 | 0.028829 | 0.198942 | 2.459019 | 1.153247005 |
| Many Pivot Sort | | 0.000178 | 0.000444 | 0.006715 | 0.046518 | 0.219773 | 2.657166 | 1.246175297 |
| mmSort | | 0.000133 | 0.000296 | 0.006239 | 0.052798 | 0.235559 | 2.683579 | 1.25856264 |
| Quick Sort (3 Way & Median of 5) | | 0.000117 | 0.000318 | 0.005687 | 0.046466 | 0.238949 | 2.719967 | 1.275628126 |
| Quick Sort (Median of 5) | | 0.000133 | 0.000300 | 0.006279 | 0.050290 | 0.224468 | 2.873546 | 1.347654621 |
| Quick Sort (Median of 3) | | 0.000128 | 0.000304 | 0.002890 | 0.022415 | 0.195613 | 2.887418 | 1.354160404 |

ソート済み(実行時間)

| アルゴリズム | 安定 | 100 | 1000 | 10000 | 100000 | 1000000 | 10000000 | RATIO |
|----------------------------------|----|----------|----------|----------|----------|----------|----------|-------------|
| Arrays.Sort | 安定 | 0.000064 | 0.000108 | 0.000400 | 0.001131 | 0.007588 | 0.058192 | 1 |
| Merge Sort | 安定 | 0.000026 | 0.000070 | 0.000186 | 0.000996 | 0.010390 | 0.080839 | 1.389177206 |
| MasSort | 安定 | 0.000034 | 0.000095 | 0.000290 | 0.000964 | 0.010082 | 0.093649 | 1.609310558 |
| MatSort(1/5) | 安定 | 0.000120 | 0.000250 | 0.000831 | 0.003686 | 0.020035 | 0.169972 | 2.920882596 |
| Quick Sort (Median of 3) | | 0.000100 | 0.000199 | 0.001188 | 0.014999 | 0.067431 | 0.742103 | 12.7526636 |
| Quick Sort (3 Way & Median of 5) | | 0.000093 | 0.000214 | 0.001249 | 0.023143 | 0.102159 | 0.786832 | 13.52130877 |
| Many Pivot Sort | | 0.000182 | 0.000393 | 0.004428 | 0.032977 | 0.115191 | 0.847689 | 14.56710544 |
| MatMmsSort(1/5) | 安定 | 0.000177 | 0.000345 | 0.004970 | 0.035287 | 0.090751 | 0.868309 | 14.92144968 |
| mmsSort (Half memory) | 安定 | 0.000163 | 0.000298 | 0.005112 | 0.036591 | 0.101548 | 0.917651 | 15.76936692 |
| mmSort | | 0.000118 | 0.000245 | 0.004904 | 0.032344 | 0.141068 | 0.928944 | 15.9634314 |
| mmsSort (dual pivot stable Sort) | 安定 | 0.000124 | 0.000269 | 0.004880 | 0.032730 | 0.104381 | 0.952324 | 16.36520484 |
| Quick Sort (Median of 5) | | 0.000099 | 0.000249 | 0.004798 | 0.030699 | 0.122243 | 0.956306 | 16.43363349 |

逆順ソート済み(実行時間)

| アルゴリズム | 安定 | 100 | 1000 | 10000 | 100000 | 1000000 | 10000000 | RATIO |
|----------------------------------|----|----------|----------|----------|----------|----------|----------|-------------|
| Arrays.Sort | 安定 | 0.000113 | 0.000373 | 0.002376 | 0.012442 | 0.042921 | 0.319810 | 1 |
| Quick Sort (Median of 3) | | 0.000105 | 0.000215 | 0.001402 | 0.022580 | 0.074575 | 0.778590 | 2.434539258 |
| Quick Sort (3 Way & Median of 5) | | 0.000100 | 0.000265 | 0.001422 | 0.022885 | 0.115051 | 0.825184 | 2.580232013 |
| Many Pivot Sort | | 0.000172 | 0.000387 | 0.004914 | 0.033812 | 0.123283 | 0.863278 | 2.699346487 |
| MatMmsSort(1/5) | 安定 | 0.000176 | 0.000337 | 0.004716 | 0.029892 | 0.112428 | 0.930514 | 2.909583815 |
| mmSort | | 0.000169 | 0.000248 | 0.004848 | 0.033676 | 0.154320 | 0.941958 | 2.945367562 |
| Quick Sort (Median of 5) | | 0.000105 | 0.000258 | 0.005136 | 0.040151 | 0.124434 | 0.967934 | 3.026590788 |
| mmsSort (dual pivot stable Sort) | 安定 | 0.000114 | 0.000301 | 0.004321 | 0.029592 | 0.107598 | 0.978152 | 3.058541009 |
| mmsSort (Half memory) | 安定 | 0.000170 | 0.000352 | 0.005454 | 0.042854 | 0.129810 | 1.019806 | 3.188787092 |
| MatSort(1/5) | 安定 | 0.000174 | 0.000360 | 0.006866 | 0.018882 | 0.110284 | 1.025486 | 3.206547638 |
| MasSort | 安定 | 0.000083 | 0.000298 | 0.007004 | 0.023431 | 0.107293 | 1.103535 | 3.450595666 |
| Merge Sort | 安定 | 0.000048 | 0.000228 | 0.006061 | 0.022059 | 0.113565 | 1.187119 | 3.711950846 |

乱数データ(実行時間)

全て同値(実行時間)

| アルゴリズム | 安定 | 100 | 1000 | 10000 | 100000 | 1000000 | 10000000 | RATIO |
|----------------------------------|----|----------|----------|----------|----------|----------|----------|-------------|
| Quick Sort (3 Way & Median of 5) | | 0.000020 | 0.000060 | 0.000307 | 0.001015 | 0.006915 | 0.058167 | 1 |
| Arrays.Sort | 安定 | 0.000058 | 0.000110 | 0.000409 | 0.001091 | 0.007744 | 0.059189 | 1.0175701 |
| Merge Sort | 安定 | 0.000034 | 0.000062 | 0.000200 | 0.000901 | 0.010681 | 0.078663 | 1.352364743 |
| MasSort | 安定 | 0.000036 | 0.000093 | 0.000295 | 0.001001 | 0.009625 | 0.091958 | 1.580930768 |
| mmsSort (Half memory) | 安定 | 0.000150 | 0.000200 | 0.000599 | 0.001991 | 0.014260 | 0.129352 | 2.223803875 |
| mmsSort (dual pivot stable Sort) | 安定 | 0.000076 | 0.000146 | 0.000569 | 0.002036 | 0.015121 | 0.131434 | 2.259597366 |
| MatSort(1/5) | 安定 | 0.000127 | 0.000238 | 0.000872 | 0.003724 | 0.020046 | 0.167862 | 2.885863118 |
| MatMmsSort(1/5) | 安定 | 0.000170 | 0.000306 | 0.001101 | 0.004509 | 0.025532 | 0.217537 | 3.739869686 |
| mmSort | | 0.000113 | 0.000250 | 0.005774 | 0.022179 | 0.087805 | 0.879071 | 15.11288187 |
| Many Pivot Sort | | 0.000173 | 0.000415 | 0.004523 | 0.012697 | 0.088277 | 0.958481 | 16.47808895 |
| Quick Sort (Median of 5) | | 0.000117 | 0.000271 | 0.005376 | 0.012877 | 0.081773 | 0.963940 | 16.57193942 |
| Quick Sort (Median of 3) | | 0.000105 | 0.000246 | 0.002506 | 0.020532 | 0.086007 | 1.042321 | 17.91945605 |

乱数データ(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) | | 373.2 | 6813.5 | 104174.4 | 1428079.1 | 17997846.2 | 216851217.8 | 1 |
| Arrays.Sort | 安定 | 532.5 | 8677.3 | 120387.1 | 1534761 | 18640446.6 | 220246159.4 | 1.015655626 |
| Merge Sort | 安定 | 566.9 | 9116.9 | 124103.2 | 1567764.1 | 19069428.1 | 223783615.5 | 1.031968452 |
| MasSort | 安定 | 530 | 8776 | 122640.5 | 1573617.9 | 19337151 | 229283496.1 | 1.057330913 |
| mmsSort (dual pivot stable Sort) | 安定 | 500.1 | 8920.6 | 123512.9 | 1595981 | 19529194.2 | 230384965 | 1.062410289 |
| MatSort(1/5) | 安定 | 599.7 | 9487.7 | 129642.8 | 1640909.4 | 19879874.4 | 233537962 | 1.076950198 |
| mmSort | | 555.3 | 9286.6 | 129267.9 | 1680866.8 | 20541484.2 | 243247439.1 | 1.121725031 |
| Many Pivot Sort | | 640.1 | 10194.2 | 138966.7 | 1766960.6 | 20957675 | 243335423.3 | 1.122130767 |
| mmsSort (Half memory) | 安定 | 610.1 | 10085.4 | 136253.7 | 1730349.1 | 20873141.9 | 244107390.2 | 1.125690659 |
| MatMmsSort(1/5) | 安定 | 677.9 | 11096.5 | 147453.6 | 1834074.7 | 21967524.1 | 255056643.1 | 1.176182664 |
| Quick Sort (Median of 5) | | 640.1 | 10439.9 | 142456.1 | 1815721 | 22119842.6 | 261429914.3 | 1.205572728 |
| Quick Sort (Median of 3) | | 615.2 | 10409.4 | 146049.8 | 1853520.6 | 22762240.7 | 268129054.9 | 1.236465525 |

文字列・乱数データ(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) | | 373.2 | 6813.5 | 104174.4 | 1428079.1 | 17997846.2 | 216851217.8 | 1 |
| Arrays.Sort | 安定 | 532.5 | 8677.3 | 120387.1 | 1534761 | 18640446.6 | 220246159.4 | 1.015655626 |
| Merge Sort | 安定 | 566.9 | 9116.9 | 124103.2 | 1567764.1 | 19069428.1 | 223783615.5 | 1.031968452 |
| MasSort | 安定 | 530 | 8776 | 122640.5 | 1573617.9 | 19337151 | 229283496.1 | 1.057330913 |
| mmsSort (dual pivot stable Sort) | 安定 | 500.1 | 8920.6 | 123512.9 | 1595981 | 19529194.2 | 230384965 | 1.062410289 |
| MatSort(1/5) | 安定 | 599.7 | 9487.7 | 129642.8 | 1640909.4 | 19879874.4 | 233537962 | 1.076950198 |
| mmSort | | 555.3 | 9286.6 | 129267.9 | 1680866.8 | 20541484.2 | 243247439.1 | 1.121725031 |
| Many Pivot Sort | | 640.1 | 10194.2 | 138966.7 | 1766960.6 | 20957675 | 243335423.3 | 1.122130767 |
| mmsSort (Half memory) | 安定 | 610.1 | 10085.4 | 136253.7 | 1730349.1 | 20873141.9 | 244107390.2 | 1.125690659 |
| MatMmsSort(1/5) | 安定 | 677.9 | 11096.5 | 147453.6 | 1834074.7 | 21967524.1 | 255056643.1 | 1.176182664 |
| Quick Sort (Median of 5) | | 640.1 | 10439.9 | 142456.1 | 1815721 | 22119842.6 | 261429914.3 | 1.205572728 |
| Quick Sort (Median of 3) | | 615.2 | 10409.4 | 146049.8 | 1853520.6 | 22762240.7 | 268129054.9 | 1.236465525 |

乱数データ(実行時間)

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 | 538.4 | 8682.8 | 120383.4 | 1534760.2 | 18640445.5 | 220246154.7 | 1 |
| Merge Sort | 安定 | 575.3 | 9122.8 | 124115.7 | 1567769.4 | 19069432.3 | 223783619 | 1.016061412 |
| MatSort(1/5) | 安定 | 594.3 | 9410.4 | 128819.6 | 1632344.2 | 19795018.9 | 232693694.5 | 1.056516491 |
| MasSort | 安定 | 585.2 | 9262 | 127371.4 | 1620585.9 | 19805791.5 | 233968886.9 | 1.062306342 |
| mmSort | | 710.9 | 10512.6 | 141814.4 | 1804584.7 | 21741477 | 255749785.2 | 1.161199775 |
| Many Pivot Sort | | 789.9 | 11536.8 | 152755.4 | 1908601.1 | 22356308.7 | 257429690.8 | 1.168827175 |
| mmsSort (Half memory) | 安定 | 751.4 | 11365.7 | 151385.7 | 1868658.7 | 22381989.9 | 258466943.2 | 1.173536689 |
| MatMmsSort(1/5) | 安定 | 719.9 | 11478 | 151047.8 | 1872087.6 | 22324797.6 | 258933613.9 | 1.175655549 |
| mmsSort (dual pivot stable Sort) | 安定 | 772.4 | 11633 | 151667.4 | 1884909.4 | 22378922 | 259531640.3 | 1.178370813 |
| Quick Sort (3 Way & Median of 5) | | 745.9 | 10935.7 | 147093.9 | 1844559.1 | 22215759.8 | 259924298.5 | 1.180153628 |
| Quick Sort (Median of 5) | | 789.9 | 11750.9 | 155964.2 | 1971285.6 | 23565727.7 | 274894927.9 | 1.24812589 |
| Quick Sort (Median of 3) | | 765.3 | 11849.5 | 158404.6 | 2011851.6 | 24192679.1 | 283374055.2 | 1.286624303 |

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 | 363.7 | 5333.5 | 70190.7 | 867362.9 | 10320330 | 120123319.2 | 1 |
| Merge Sort | 安定 | 385.5 | 5555.5 | 72044.8 | 884070.6 | 10535065.9 | 121891310.4 | 1.014718135 |
| MasSort | 安定 | 398.8 | 5800.2 | 75752.3 | 934353.9 | 11051641.5 | 127599655.5 | 1.062238842 |
| MatSort(1/5) | 安定 | 465.1 | 6340.9 | 81011.5 | 977379.7 | 11560503 | 133418518.2 | 1.110679584 |
| Quick Sort (3 Way & Median of 5) | | 368.4 | 6734.8 | 103606.2 | 1411485.9 | 17892297.4 | 214872687 | 1.78876748 |
| mmsSort (dual pivot stable Sort) | 安定 | 489.8 | 8582.1 | 120833 | 1549641.3 | 18958407 | 224452470.3 | 1.868517052 |
| mmsSort (Half memory) | 安定 | 573.2 | 9436.2 | 128555.9 | 1631873.6 | 19833532.3 | 232822191.7 | 1.938193127 |
| MatMmsSort(1/5) | 安定 | 556 | 9748.8 | 132166.4 | 1664106.2 | 20115639.6 | 235771383.2 | 1.962744493 |
| mmSort | | 527.9 | 9225.9 | 129233.1 | 1651333.3 | 20185507.1 | 237845964.5 | 1.980014922 |
| Many Pivot Sort | | 605.5 | 10028.8 | 136242.8 | 1721557.7 | 20607562.3 | 239644060.3 | 1.994983671 |
| Quick Sort (Median of 5) | | 605.5 | 10168.9 | 140423.7 | 1793265.2 | 21765595.4 | 255752628.9 | 2.129083933 |
| Quick Sort (Median of 3) | | 631.5 | 10462.5 | 145015.8 | 1861695.1 | 22719692 | 270782064.1 | 2.254200649 |

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 | 999 | 9999 | 99999 | 999999 | 9999999 | 1 |
| Arrays.Sort | 安定 | 99 | 999 | 9999 | 99999 | 999999 | 9999999 | 1 |
| MasSort | 安定 | 118 | 1267 | 13201 | 137559 | 1189223 | 10136712 | 1.013671301 |
| MatSort(1/5) | 安定 | 264 | 2654 | 27204 | 261584 | 2714264 | 28028384 | 2.80283868 |
| Quick Sort (3 Way & Median of 5) | | 321 | 6325 | 94358 | 1285023 | 16240389 | 194051586 | 19.40516054 |
| mmsSort (Half memory) | 安定 | 325 | 7165 | 105081 | 1357919 | 17179901 | 205463195 | 20.54632155 |
| MatMmsSort(1/5) | 安定 | 329 | 6774 | 108454 | 1410024 | 17179909 | 207801164 | 20.78011848 |
| Quick Sort (Median of 3) | | 443 | 7993 | 112733 | 1466133 | 17989253 | 212514213 | 21.25142343 |
| mmsSort (dual pivot stable Sort) | 安定 | 391 | 8297 | 115019 | 1458001 | 18180258 | 215463371 | 21.54633925 |
| Many Pivot Sort | | 535 | 8963 | 124008 | 1612242 | 19076864 | 224646910 | 22.46469325 |
| mmSort | | 516 | 8328 | 121732 | 1590835 | 19529753 | 232743309 | 23.27433323 |
| Quick Sort (Median of 5) | | 535 | 9453 | 132326 | 1701864 | 20839611 | 246234844 | 24.62348686 |

乱数データ(実行時間)

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 | 4338 | 41215 | 421964 | 4306436 | 41249953 | 1 |
| MatSort(1/5) | 安定 | 334 | 4175 | 57059 | 683179 | 8322705 | 97993859 | 2.37561141 |
| MasSort | 安定 | 369 | 5149 | 65653 | 792635 | 9263783 | 105935654 | 2.568139993 |
| Merge Sort | 安定 | 396 | 5730 | 74614 | 907446 | 10738262 | 124135094 | 3.009339041 |
| Quick Sort (3 Way & Median of 5) | | 320 | 6324 | 94357 | 1285022 | 16240388 | 194051585 | 4.704286209 |
| MatMmsSort(1/5) | 安定 | 264 | 6840 | 99359 | 1318839 | 16784790 | 198811124 | 4.819669104 |
| Quick Sort (Median of 3) | | 421 | 7971 | 112711 | 1466111 | 17989231 | 212514191 | 5.151865046 |
| mmsSort (Half memory) | 安定 | 416 | 8330 | 117018 | 1528426 | 18381500 | 215870190 | 5.23322269 |
| mmsSort (dual pivot stable Sort) | 安定 | 462 | 8718 | 122012 | 1578263 | 18880785 | 220870176 | 5.35443461 |
| Many Pivot Sort | | 512 | 9035 | 124127 | 1612205 | 19076939 | 224647180 | 5.445998448 |
| mmSort | | 485 | 8482 | 120034 | 1556424 | 19418648 | 230854215 | 5.596472195 |
| Quick Sort (Median of 5) | | 512 | 9396 | 132588 | 1701320 | 20815054 | 246200776 | 5.968510461 |

全て同値(比較回数)

| アルゴリズム | 安定 | 100 | 1000 | 10000 | 100000 | 1000000 | 10000000 | RATIO |
|----------------------------------|----|-----|------|--------|---------|----------|-----------|-------------|
| Arrays.Sort | 安定 | 99 | 999 | 9999 | 99999 | 999999 | 9999999 | 1 |
| Merge Sort | 安定 | 99 | 999 | 9999 | 99999 | 999999 | 9999999 | 1 |
| Quick Sort (3 Way & Median of 5) | | 103 | 1003 | 10003 | 100003 | 1000003 | 10000003 | 1.0000004 |
| mmsSort (dual pivot stable Sort) | 安定 | 105 | 1011 | 10011 | 100011 | 1000011 | 10000011 | 1.0000012 |
| mmsSort (Half memory) | 安定 | 111 | 1023 | 10023 | 100023 | 1000023 | 10000023 | 1.0000024 |
| MasSort | 安定 | 118 | 1267 | 13201 | 137559 | 1189223 | 10136712 | 1.013671301 |
| MatMmsSort(1/5) | 安定 | 289 | 2639 | 26059 | 260059 | 2600059 | 26000059 | 2.60000616 |
| MatSort(1/5) | 安定 | 264 | 2654 | 27204 | 261584 | 2714264 | 28028384 | 2.80283868 |
| mmSort | | 399 | 6983 | 99935 | 1395551 | 16979967 | 199862911 | 19.9862931 |
| Many Pivot Sort | | 437 | 7308 | 112284 | 1443840 | 17354823 | 209118505 | 20.91185259 |
| Quick Sort (Median of 5) | | 437 | 7345 | 112745 | 1445049 | 17360441 | 209938041 | 20.9938062 |
| Quick Sort (Median of 3) | | 427 | 7283 | 114747 | 1436443 | 17307515 | 215067003 | 21.50670245 |