|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| n | Insertion Sort | Merge Sort | Quick Sort 1 | Quick Sort 2 | Quick Sort 3 |
| 1 | 6673 | 11292 | 6672 | 7699 | 8725 |
| 2 | 1540 | 5133 | 3079 | 2053 | 3079 |
| 3 | 3080 | 7699 | 4620 | 3080 | 4619 |
| 4 | 5133 | 13345 | 6673 | 6673 | 8726 |
| 5 | 40036 | 36443 | 16425 | 14372 | 26690 |
| 6 | 54407 | 71346 | 42602 | 32850 | 59028 |
| 7 | 162710 | 127807 | 114975 | 58001 | 104709 |
| 8 | 485563 | 238675 | 70833 | 72372 | 227383 |
| 9 | 2213265 | 140126 | 158603 | 131913 | 189914 |
| 10 | 10071587 | 471705 | 166816 | 1297573 | 162197 |
| 11 | 1624532 | 632361 | 301295 | 260233 | 340818 |
| 12 | 9155382 | 769407 | 629795 | 615937 | 856664 |
| 13 | 40688248 | 1673294 | 1386370 | 1032207 | 1235979 |
| 14 | 60252955 | 1798021 | 1864747 | 1482353 | 1942253 |
| 15 | 259707544 | 3772611 | 4884889 | 4770941 | 5415108 |
| 16 | 934612189 | 6637229 | 9490554 | 7825986 | 10992412 |

Unsorted Data Set

Sorted Data Sets

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| n | Insertion Sort | Merge Sort | Quick Sort 1 | Quick Sort 2 | Quick Sort 3 |
| 1 | 9752 | 14885 | 8725 | 7699 | 7186 |
| 2 | 0 | 1540 | 15399 | 513 | 513 |
| 3 | 513 | 9753 | 1027 | 513 | 513 |
| 4 | 0 | 2053 | 1027 | 513 | 1027 |
| 5 | 513 | 3593 | 2054 | 2053 | 2053 |
| 6 | 513 | 9239 | 5133 | 5133 | 4106 |
| 7 | 1027 | 17451 | 16424 | 16938 | 6672 |
| 8 | 1540 | 30797 | 58514 | 59027 | 14885 |
| 9 | 4107 | 66726 | 251507 | 225843 | 29257 |
| 10 | 8213 | 149878 | 955728 | 950082 | 72373 |
| 11 | 16939 | 211985 | 2504295 | 2236875 | 124214 |
| 12 | 16425 | 236109 | 9246232 | 9502872 | 526626 |
| 13 | 44656 | 728859 | 70946125 | 37274420 | 816115 |