DataType	DataSize	Algorithm	Comparisons	Time(s)	Algorithm	Comparisons	Time(s)
NearlySorted		bubble-sort	499500		counting-sort	1000	0.000114
NearlySorted		bubble-sort	1999000		counting-sort	2000	0.000225
, NearlySorted		bubble-sort	12497500		counting-sort	5000	0.000346
, NearlySorted		bubble-sort	49995000		counting-sort	10000	0.000691
NearlySorted		bubble-sort	199990000		counting-sort	20000	0.001696
, NearlySorted		flash-sort	1000		heap-sort	17555	0.00076
, NearlySorted	2000	flash-sort	2000		heap-sort	39210	0.001945
, NearlySorted	5000	flash-sort	5000		heap-sort	112126	0.004726
, NearlySorted	10000	flash-sort	10000		heap-sort	244459	0.011009
NearlySorted	20000	flash-sort	20000	0.002367	heap-sort	529056	0.022404
NearlySorted	1000	insertion-sort	8616		merge-sort	6603	0.002117
NearlySorted	2000	insertion-sort	15732	0.000418	merge-sort	13779	0.004164
NearlySorted	5000	insertion-sort	22654	0.001137	merge-sort	37168	0.011162
NearlySorted	10000	insertion-sort	92224	0.002483	merge-sort	88843	0.020868
NearlySorted	20000	insertion-sort	133348	0.004522	merge-sort	176813	0.045811
NearlySorted	1000	quick-sort	8150	0.000237	radix-sort	10029	0.00035
NearlySorted	2000	quick-sort	18774	0.000764	radix-sort	26039	0.000561
NearlySorted	5000	quick-sort	51823	0.001639	radix-sort	65039	0.001382
NearlySorted	10000	quick-sort	114727	0.003596	radix-sort	130039	0.002799
NearlySorted	20000	quick-sort	247334	0.006639	radix-sort	320049	0.007286
NearlySorted	1000	$selection\hbox{-}sort$	499500	0.014791	shaker-sort	499500	0.010635
NearlySorted	2000	$selection\hbox{-}sort$	1999000	0.059601	shaker-sort	1999000	0.045795
NearlySorted	5000	$selection\hbox{-}sort$	12497500	0.369856	shaker-sort	12497500	0.25641
NearlySorted	10000	$selection\hbox{-}sort$	49995000	1.478036	shaker-sort	49995000	1.0378
NearlySorted	20000	$selection\hbox{-}sort$	199990000	5.920987	shaker-sort	199990000	4.137657
NearlySorted	1000	shell-sort	10526	0.000492			
NearlySorted	2000	shell-sort	22340	0.000997			
NearlySorted	5000	shell-sort	60668	0.00204			
NearlySorted	10000	shell-sort	141565	0.004404			
NearlySorted	20000	shell-sort	291948	0.00911			
Dandana	1000	عدم والمادية	400500	0.022256		1000	0.000133
Random		bubble-sort	499500		counting-sort	1000	0.000122
Random Random		bubble-sort bubble-sort	1999000		counting-sort	2000	0.000156
			12497500		counting-sort	5000	0.000367 0.001089
Random Random		bubble-sort bubble-sort	49995000		counting-sort	10000	0.001089
Random		flash-sort	199990000		counting-sort	20000	0.00183
Random		flash-sort	1000 2000		heap-sort	16824 37690	0.000899
Random		flash-sort	5000		heap-sort		0.001768
Random		flash-sort			heap-sort	107764	
Random		flash-sort	10000 20000		heap-sort heap-sort	235255 510815	0.010636 0.021883
Random		insertion-sort	250639		merge-sort	8728	0.021883
Random		insertion-sort	1015106		merge-sort	19403	0.002179
Random		insertion-sort	6286466		merge-sort	55295	0.004337
Random		insertion-sort	24792933		merge-sort	120489	0.01002
Random		insertion-sort	100505762		merge-sort	260859	0.022808
Nariaoili	20000	11136111011-3011	100303702	J.UZU//I	merge-sort	200033	0.045005

Random   2000 quick-sort   23128   0.000673 radik-sort   26039   0.000556     Random   5000 quick-sort   7002   0.002597 radik-sort   5039   0.001397     Random   10000 quick-sort   152201   0.004337 radik-sort   130039   0.003204     Random   10000 quick-sort   152201   0.004387 radik-sort   130039   0.007637     Random   10000 selection-sort   1999000   0.062759 shaker-sort   4999500   0.018194     Random   5000 selection-sort   19999000   0.62759 shaker-sort   1999000   0.73243     Random   10000 selection-sort   1499500   0.371838 shaker-sort   19999000   1.782078     Random   20000 selection-sort   14674   0.000487   19999000   7.1431     Random   1000 shell-sort   112443   0.004149   19999000   1999000   1999000   1999000   1999000   1999000   19000   19000   19000   19000   19000   19000   19000   19000   19000   19000   19000   1900	Random	1000 quick-sort	10884	0.000319 radix-sort	10029	0.000219
Random   5000 quick-sort   70026   0.002597 radix-sort   65039   0.001397     Random   10000 quick-sort   152201   0.004333 radix-sort   130039   0.003204     Random   20000 quick-sort   329077   0.009603 radix-sort   499500   0.016083 shaker-sort   499500   0.018194     Random   2000 selection-sort   12999000   0.072743   12497500   0.445282     Random   10000 selection-sort   12499500   0.371838 shaker-sort   12999000   1.782078     Random   20000 selection-sort   19999000   5.931008 shaker-sort   19999000   7.1431     Random   1000 shell-sort   14674   0.000487   1999000   7.1431     Random   2000 shell-sort   112443   0.001449   199000   7.1431     Random   10000 shell-sort   1616825   0.020348   1000   0.000074     Reversed   1000 bubble-sort   1499500   0.30361 counting-sort   1000   0.00004     Reversed   1000 bubble-sort   1499500   0.118383 counting-sort <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Random   10000 quick-sort   152201   0.004333 radix-sort   130039   0.003204     Random   20000 quick-sort   1329077   0.005603 radix-sort   320049   0.007637     Random   2000 selection-sort   1499500   0.062759 shaker-sort   1499500   0.073243     Random   5000 selection-sort   1499500   1.4995 shaker-sort   12999000   0.45282     Random   1000 selection-sort   19999000   1.4995 shaker-sort   19999000   7.1431     Random   1000 selection-sort   1999000   5.931008 shaker-sort   19999000   7.1431     Random   1000 shell-sort   14674   0.000487   1999000   7.1431     Random   2000 shell-sort   251638   0.008381   1   1000   0.00074     Reversed   1000 bubble-sort   1999000   0.119838 counting-sort   1000   0.00074     Reversed   2000 bubble-sort   1499500   0.33397 counting-sort   1000   0.000139     Reversed   1000 bubble-sort   19999000   11.71405 counting-sort   1		·				
Random   20000 quick-sort   329077   0.009603 radix-sort   320049   0.007637     Random   1000 selection-sort   499500   0.018193     Random   2000 selection-sort   1999000   0.062759 shaker-sort   1999000   0.073243     Random   5000 selection-sort   19999000   1.4993 shaker-sort   49995000   1.782078     Random   1000 shell-sort   19999000   5.931008 shaker-sort   19999000   7.1431     Random   1000 shell-sort   35008   0.001337   8   7.1431     Random   2000 shell-sort   35008   0.001337   8   7.1431     Random   2000 shell-sort   261638   0.008981   1		·				
Random   1000 selection-sort   499500   0.016083 shaker-sort   499500   0.018194     Random   2000 selection-sort   12999000   0.073283   12497500   0.371838 shaker-sort   12999000   0.445282     Random   10000 selection-sort   49995000   1.4993 shaker-sort   49995000   1.782078     Random   20000 selection-sort   19999000   5.931008 shaker-sort   19999000   7.1431     Random   2000 shell-sort   14674   0.000487   14674   0.000487     Random   2000 shell-sort   112443   0.004149   166825   0.020348     Reversed   1000 bubble-sort   1999000   0.119838 counting-sort   2000   0.00074     Reversed   2000 bubble-sort   1999000   0.19838 counting-sort   2000   0.000139     Reversed   1000 bubble-sort   1499500   0.333977 counting-sort   2000   0.000874     Reversed   2000 bubble-sort   1499500   0.3758756 counting-sort   2000   0.000874     Reversed   1000 bubble-sort   19999000		•				
Random   2000 selection-sort   1999000   0.062759 shaker-sort   1999000   0.073243     Random   5000 selection-sort   12497500   0.371838 shaker-sort   12497500   0.445282     Random   20000 selection-sort   19999000   5.931008 shaker-sort   49995000   7.1431     Random   1000 shell-sort   14674   0.000487   19990000   7.1431     Random   2000 shell-sort   35008   0.001337   8.001337   8.0014149   8.0014149   8.0014149   8.0014149   8.0014149   8.0014149   8.0014149   9.0014149   <		·				
Random   5000 selection-sort   12497500   0.371838 shaker-sort   12497500   0.445282     Random   10000 selection-sort   199990000   1.4993 shaker-sort   49995000   7.1431     Random   20000 shell-sort   14674   0.000487   19990000   7.1431     Random   2000 shell-sort   35008   0.001337   1838   1848						
Random   10000 selection-sort   49995000   1.4993 shaker-sort   49995000   7.1431     Random   20000 selection-sort   199990000   5.931008 shaker-sort   199990000   7.1431     Random   1000 shell-sort   35008   0.001337     Random   5000 shell-sort   261638   0.008981     Random   1000 bubble-sort   261638   0.008981     Random   20000 shell-sort   616825   0.020348     Reversed   1000 bubble-sort   1999000   0.119838 counting-sort   2000   0.000139     Reversed   2000 bubble-sort   1999000   0.119838 counting-sort   2000   0.000139     Reversed   10000 bubble-sort   19990000   1.39377 counting-sort   5000   0.00052     Reversed   10000 bubble-sort   199990000   1.71405 counting-sort   1000   0.00087     Reversed   1000 flash-sort   1000   0.000189 heap-sort   15965   0.00068     Reversed   2000 flash-sort   2000   0.000247 heap-sort   103227   0.004622						
Random   20000 selection-sort   199990000   5.931008 shaker-sort   199990000   7.1431     Random   1000 shell-sort   14674   0.000487   1						
Random   1000 shell-sort   14674   0.000487     Random   2000 shell-sort   35008   0.001337     Random   5000 shell-sort   112443   0.004149     Random   10000 shell-sort   261638   0.008981     Random   20000 shell-sort   616825   0.020348     Reversed   1000 bubble-sort   1999000   0.119838 counting-sort   2000   0.000139     Reversed   2000 bubble-sort   12497500   0.733977 counting-sort   5000   0.00052     Reversed   10000 bubble-sort   19999000   2.935756 counting-sort   10000   0.000874     Reversed   10000 bubble-sort   199990000   1.71405 counting-sort   20000   0.001439     Reversed   1000 flash-sort   1000   0.000247 heap-sort   15965   0.000685     Reversed   2000 flash-sort   2000   0.00247 heap-sort   35964   0.001533     Reversed   5000 flash-sort   2000   0.00221 heap-sort   1002682   0.009838     Reversed   20000 flash-sort						
Random   2000 shell-sort   35008   0.001337     Random   5000 shell-sort   112443   0.004149     Random   10000 shell-sort   261638   0.008981     Random   20000 shell-sort   616825   0.020348     Reversed   1000 bubble-sort   1999000   0.119838 counting-sort   2000   0.000074     Reversed   5000 bubble-sort   19995000   2.935756 counting-sort   1000   0.00052     Reversed   10000 bubble-sort   49995000   2.935756 counting-sort   1000   0.000874     Reversed   20000 bubble-sort   19999000   117.1405 counting-sort   1000   0.001439     Reversed   1000 flash-sort   1000   0.000247 heap-sort   15965   0.000685     Reversed   2000 flash-sort   2000   0.00247 heap-sort   35964   0.001533     Reversed   10000 flash-sort   2000   0.00241 heap-sort   103227   0.004622     Reversed   10000 flash-sort   2000   0.00291 heap-sort   493307   0.02213						712132
Random   10000 shell-sort   261638   0.004149						
Random   10000 shell-sort   261638   0.08981						
Reversed   1000 bubble-sort   1999000   1938   1000   1938   1000   1938   1000   1938   1000   1938   1000   1938   1000   1938   1000   1938   1000   1938   1000   1938   1000   1938   1000   1938   1000   1938   1000   1938   1000   1938   1000   1938   1000   1938   1000   1000   100052   1000   100052   1000   1000   100052   1000   100052   1000   100052   1000   100052   1000   100052   1000   100052   1000   100052   1000   100052   10000   100052   10000   100052   10000   100052   10000   100052   10000   100053   100053   100						
Reversed   1000 bubble-sort   499500   0.030361 counting-sort   1000   0.000074     Reversed   2000 bubble-sort   1999000   0.119838 counting-sort   2000   0.000139     Reversed   5000 bubble-sort   1999000   0.733977 counting-sort   5000   0.00058     Reversed   10000 bubble-sort   19999000   1.71405 counting-sort   10000   0.001439     Reversed   1000 flash-sort   1000   0.000189 heap-sort   15965   0.000685     Reversed   2000 flash-sort   2000   0.000247 heap-sort   15965   0.000685     Reversed   5000 flash-sort   5000   0.000247 heap-sort   15927   0.004622     Reversed   10000 flash-sort   10000   0.001221 heap-sort   226682   0.00983     Reversed   10000 flash-sort   20000   0.00241 heap-sort   493307   0.022133     Reversed   1000 insertion-sort   499500   0.015792 merge-sort   49320   0.00247     Reversed   5000 insertion-sort   1999000   0.062021 merge-sort   19864	Random					
Reversed   2000 bubble-sort   1999000   0.119838 counting-sort   2000   0.000139     Reversed   5000 bubble-sort   12497500   0.733977 counting-sort   5000   0.00052     Reversed   10000 bubble-sort   49995000   2.935756 counting-sort   10000   0.000874     Reversed   20000 bubble-sort   19999000   11.71405 counting-sort   20000   0.001439     Reversed   1000 flash-sort   1000   0.000189 heap-sort   15965   0.000685     Reversed   2000 flash-sort   2000   0.00247 heap-sort   15964   0.001533     Reversed   5000 flash-sort   5000   0.00848 heap-sort   103227   0.004622     Reversed   10000 flash-sort   1000   0.00121 heap-sort   226682   0.00938     Reversed   20000 flash-sort   20000   0.015792 merge-sort   49307   0.022133     Reversed   1000 insertion-sort   1999000   0.062021 merge-sort   10864   0.004654     Reversed   10000 insertion-sort   19995000   0.1517119 merge-sort   6						
Reversed   2000 bubble-sort   1999000   0.119838 counting-sort   2000   0.000139     Reversed   5000 bubble-sort   12497500   0.733977 counting-sort   5000   0.00052     Reversed   10000 bubble-sort   49995000   2.935756 counting-sort   10000   0.000874     Reversed   20000 bubble-sort   19999000   11.71405 counting-sort   20000   0.001439     Reversed   1000 flash-sort   1000   0.000189 heap-sort   15965   0.00684     Reversed   2000 flash-sort   2000   0.00247 heap-sort   15964   0.001533     Reversed   5000 flash-sort   5000   0.00848 heap-sort   103227   0.004622     Reversed   10000 flash-sort   1000   0.00121 heap-sort   103227   0.004622     Reversed   1000 insertion-sort   10900   0.015792 merge-sort   493307   0.022133     Reversed   2000 insertion-sort   1999000   0.062021 merge-sort   10864   0.004654     Reversed   10000 insertion-sort   19995000   1.517119 merge-sort <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td></t<>						
Reversed   5000 bubble-sort   12497500   0.733977 counting-sort   5000   0.00052     Reversed   10000 bubble-sort   49995000   2.935756 counting-sort   10000   0.000874     Reversed   20000 bubble-sort   199990000   11.71405 counting-sort   20000   0.001439     Reversed   1000 flash-sort   1000   0.000247 heap-sort   15965   0.00685     Reversed   5000 flash-sort   5000   0.00084 heap-sort   103227   0.004622     Reversed   10000 flash-sort   10000   0.001221 heap-sort   226682   0.00933     Reversed   20000 flash-sort   20000   0.00291 heap-sort   493307   0.022133     Reversed   1000 insertion-sort   499500   0.015792 merge-sort   4932   0.00273     Reversed   2000 insertion-sort   1999000   0.62021 merge-sort   10864   0.004654     Reversed   2000 insertion-sort   19999000   0.517119 merge-sort   10864   0.014995     Reversed   10000 insertion-sort   19999000   0.5075681 merge-sort	Reversed	1000 bubble-sort	499500	0.030361 counting-sort	1000	0.000074
Reversed   5000 bubble-sort   12497500   0.733977 counting-sort   5000   0.00052     Reversed   10000 bubble-sort   49995000   2.935756 counting-sort   10000   0.000874     Reversed   20000 bubble-sort   199990000   11.71405 counting-sort   20000   0.001439     Reversed   1000 flash-sort   1000   0.000189 heap-sort   15965   0.000685     Reversed   2000 flash-sort   2000   0.000247 heap-sort   35964   0.001533     Reversed   5000 flash-sort   1000   0.001221 heap-sort   103227   0.004622     Reversed   20000 flash-sort   1000   0.0015792 merge-sort   493307   0.022133     Reversed   1000 insertion-sort   499500   0.015792 merge-sort   4932   0.002073     Reversed   2000 insertion-sort   1499500   0.381045 merge-sort   10864   0.004654     Reversed   10000 insertion-sort   1499500   0.57581 merge-sort   139216   0.044046     Reversed   2000 insertion-sort   18262   0.000682 radix-sort	Reversed	2000 bubble-sort	1999000	0.119838 counting-sort	2000	0.000139
Reversed   10000 bubble-sort   49995000   2.935756 counting-sort   10000   0.000874     Reversed   20000 bubble-sort   19999000   11.71405 counting-sort   20000   0.001439     Reversed   1000 flash-sort   1000   0.000189 heap-sort   15965   0.000685     Reversed   2000 flash-sort   2000   0.000247 heap-sort   35964   0.001533     Reversed   5000 flash-sort   5000   0.00084 heap-sort   103227   0.004622     Reversed   20000 flash-sort   20000   0.00291 heap-sort   29307   0.022133     Reversed   20000 flash-sort   20000   0.00291 heap-sort   493307   0.022133     Reversed   1000 insertion-sort   499500   0.015792 merge-sort   493307   0.022133     Reversed   2000 insertion-sort   1999000   0.062021 merge-sort   10864   0.004654     Reversed   5000 insertion-sort   19999000   0.381045 merge-sort   29804   0.010995     Reversed   10000 insertion-sort   19999000   6.075681 merge-sort <t< td=""><td>Reversed</td><td>5000 bubble-sort</td><td>12497500</td><td></td><td>5000</td><td>0.00052</td></t<>	Reversed	5000 bubble-sort	12497500		5000	0.00052
Reversed   1000 flash-sort   1000   0.000189 heap-sort   15965   0.000685     Reversed   2000 flash-sort   2000   0.000247 heap-sort   35964   0.001533     Reversed   5000 flash-sort   5000   0.00084 heap-sort   103227   0.004622     Reversed   10000 flash-sort   10000   0.001221 heap-sort   226682   0.009838     Reversed   20000 flash-sort   20000   0.00291 heap-sort   493307   0.022133     Reversed   1000 insertion-sort   499500   0.015792 merge-sort   4932   0.002073     Reversed   2000 insertion-sort   1999000   0.062021 merge-sort   10864   0.004654     Reversed   5000 insertion-sort   12497500   0.381045 merge-sort   19804   0.010995     Reversed   10000 insertion-sort   19999000   6.075681 merge-sort   64608   0.021525     Reversed   2000 insertion-sort   19999000   6.075681 merge-sort   139216   0.040464     Reversed   1000 quick-sort   8135   0.000364 radix-sort   10029 </td <td>Reversed</td> <td>10000 bubble-sort</td> <td>49995000</td> <td></td> <td>10000</td> <td>0.000874</td>	Reversed	10000 bubble-sort	49995000		10000	0.000874
Reversed   2000 flash-sort   2000 0.000247 heap-sort   35964 0.001533     Reversed   5000 flash-sort   5000 0.00084 heap-sort   103227 0.004622     Reversed   10000 flash-sort   10000 0.001221 heap-sort   226682 0.009838     Reversed   20000 flash-sort   20000 0.00291 heap-sort   493307 0.022133     Reversed   1000 insertion-sort   499500 0.015792 merge-sort   4932 0.002073     Reversed   2000 insertion-sort   1999000 0.062021 merge-sort   10864 0.004654     Reversed   5000 insertion-sort   19995000 1.517119 merge-sort   64608 0.021525     Reversed   10000 insertion-sort   19999000 6.075681 merge-sort   139216 0.044046     Reversed   20000 insertion-sort   19999000 6.075681 merge-sort   10029 0.000334     Reversed   1000 quick-sort   8135 0.000364 radix-sort   10029 0.000334     Reversed   2000 quick-sort   18262 0.000682 radix-sort   26039 0.000566     Reversed   5000 quick-sort   114243 0.003443 radix-sort   15039 0.001398     Reversed   10000 quick-sort   248473 0.007144 radix-sort   320049 0.007785	Reversed	20000 bubble-sort	199990000	11.71405 counting-sort	20000	0.001439
Reversed   5000 flash-sort   5000 0.00084 heap-sort   103227 0.004622     Reversed   10000 flash-sort   10000 0.001221 heap-sort   226682 0.009838     Reversed   20000 flash-sort   20000 0.00291 heap-sort   493307 0.022133     Reversed   1000 insertion-sort   499500 0.015792 merge-sort   4932 0.002073     Reversed   2000 insertion-sort   1999000 0.062021 merge-sort   10864 0.004654     Reversed   5000 insertion-sort   12497500 0.381045 merge-sort   29804 0.010995     Reversed   10000 insertion-sort   49995000 1.517119 merge-sort   64608 0.021525     Reversed   20000 insertion-sort   19999000 6.075681 merge-sort   139216 0.044046     Reversed   20000 insertion-sort   19999000 6.075681 merge-sort   139216 0.044046     Reversed   20000 quick-sort   8135 0.000364 radix-sort   10029 0.000334     Reversed   2000 quick-sort   18262 0.000682 radix-sort   26039 0.000566     Reversed   5000 quick-sort   114243 0.003443 radix-sort   130039 0.00273     Reversed   10000 gelection-sort   499500 0.014979 shaker-sort   499500 0.0024681	Reversed	1000 flash-sort	1000	0.000189 heap-sort	15965	0.000685
Reversed   10000 flash-sort   10000   0.001221 heap-sort   226682   0.009838     Reversed   20000 flash-sort   20000   0.00291 heap-sort   493307   0.022133     Reversed   1000 insertion-sort   499500   0.015792 merge-sort   4932   0.002073     Reversed   2000 insertion-sort   1999000   0.062021 merge-sort   10864   0.004654     Reversed   5000 insertion-sort   12497500   0.381045 merge-sort   29804   0.010995     Reversed   10000 insertion-sort   49995000   1.517119 merge-sort   64608   0.021525     Reversed   20000 insertion-sort   19999000   6.075681 merge-sort   139216   0.044046     Reversed   1000 quick-sort   8135   0.000364 radix-sort   10029   0.000334     Reversed   2000 quick-sort   18262   0.000682 radix-sort   26039   0.001398     Reversed   5000 quick-sort   114243   0.003443 radix-sort   130039   0.002773     Reversed   10000 selection-sort   499500   0.014979 shaker-sort	Reversed	2000 flash-sort	2000	0.000247 heap-sort	35964	0.001533
Reversed   20000 flash-sort   20000   0.00291 heap-sort   493307   0.022133     Reversed   1000 insertion-sort   499500   0.015792 merge-sort   4932   0.002073     Reversed   2000 insertion-sort   1999000   0.062021 merge-sort   10864   0.004654     Reversed   5000 insertion-sort   12497500   0.381045 merge-sort   29804   0.010995     Reversed   10000 insertion-sort   49995000   1.517119 merge-sort   64608   0.021525     Reversed   20000 insertion-sort   19999000   6.075681 merge-sort   139216   0.044046     Reversed   1000 quick-sort   8135   0.000364 radix-sort   10029   0.000334     Reversed   2000 quick-sort   18262   0.000682 radix-sort   26039   0.000566     Reversed   5000 quick-sort   114243   0.003443 radix-sort   65039   0.001398     Reversed   10000 quick-sort   248473   0.007144 radix-sort   320049   0.007085     Reversed   2000 selection-sort   1999000   0.06092 shaker-sort	Reversed	5000 flash-sort	5000	0.00084 heap-sort	103227	0.004622
Reversed   1000 insertion-sort   499500   0.015792 merge-sort   4932   0.002073     Reversed   2000 insertion-sort   1999000   0.062021 merge-sort   10864   0.004654     Reversed   5000 insertion-sort   12497500   0.381045 merge-sort   29804   0.010995     Reversed   10000 insertion-sort   49995000   1.517119 merge-sort   64608   0.021525     Reversed   20000 insertion-sort   199990000   6.075681 merge-sort   139216   0.044046     Reversed   1000 quick-sort   8135   0.000364 radix-sort   10029   0.000334     Reversed   2000 quick-sort   18262   0.000682 radix-sort   26039   0.00566     Reversed   5000 quick-sort   52127   0.001469 radix-sort   65039   0.001398     Reversed   10000 quick-sort   114243   0.003443 radix-sort   130039   0.002773     Reversed   20000 quick-sort   248473   0.007144 radix-sort   320049   0.007085     Reversed   1000 selection-sort   499500   0.0692 shaker-sort	Reversed	10000 flash-sort	10000	0.001221 heap-sort	226682	0.009838
Reversed   2000 insertion-sort   1999000   0.062021 merge-sort   10864   0.004654     Reversed   5000 insertion-sort   12497500   0.381045 merge-sort   29804   0.010995     Reversed   10000 insertion-sort   49995000   1.517119 merge-sort   64608   0.021525     Reversed   20000 insertion-sort   199990000   6.075681 merge-sort   139216   0.044046     Reversed   1000 quick-sort   8135   0.000344 radix-sort   10029   0.000334     Reversed   2000 quick-sort   18262   0.000682 radix-sort   26039   0.000566     Reversed   5000 quick-sort   52127   0.001469 radix-sort   65039   0.001398     Reversed   10000 quick-sort   114243   0.003443 radix-sort   130039   0.002773     Reversed   20000 quick-sort   248473   0.007144 radix-sort   320049   0.007085     Reversed   1000 selection-sort   499500   0.014979 shaker-sort   499500   0.024681     Reversed   5000 selection-sort   12497500   0.377912 shaker-sort<	Reversed	20000 flash-sort	20000	0.00291 heap-sort	493307	0.022133
Reversed   5000 insertion-sort   12497500   0.381045 merge-sort   29804   0.010995     Reversed   10000 insertion-sort   49995000   1.517119 merge-sort   64608   0.021525     Reversed   20000 insertion-sort   19999000   6.075681 merge-sort   139216   0.044046     Reversed   1000 quick-sort   8135   0.000364 radix-sort   10029   0.000334     Reversed   2000 quick-sort   18262   0.000682 radix-sort   26039   0.000566     Reversed   5000 quick-sort   52127   0.001469 radix-sort   65039   0.001398     Reversed   10000 quick-sort   114243   0.003443 radix-sort   130039   0.002773     Reversed   20000 quick-sort   248473   0.007144 radix-sort   320049   0.007085     Reversed   1000 selection-sort   499500   0.014979 shaker-sort   499500   0.024681     Reversed   5000 selection-sort   1999000   0.377912 shaker-sort   12497500   0.615     Reversed   10000 shell-sort   1999000   5.896045 shaker-sort	Reversed	1000 insertion-sort	499500	0.015792 merge-sort	4932	0.002073
Reversed   10000 insertion-sort   49995000   1.517119 merge-sort   64608   0.021525     Reversed   20000 insertion-sort   199990000   6.075681 merge-sort   139216   0.044046     Reversed   1000 quick-sort   8135   0.000364 radix-sort   10029   0.000334     Reversed   2000 quick-sort   18262   0.000682 radix-sort   26039   0.000566     Reversed   5000 quick-sort   52127   0.001469 radix-sort   65039   0.001398     Reversed   10000 quick-sort   114243   0.003443 radix-sort   130039   0.002773     Reversed   20000 quick-sort   248473   0.007144 radix-sort   320049   0.007085     Reversed   1000 selection-sort   499500   0.014979 shaker-sort   499500   0.024681     Reversed   2000 selection-sort   1999000   0.06092 shaker-sort   1999000   0.097791     Reversed   5000 selection-sort   12497500   0.377912 shaker-sort   12497500   0.615     Reversed   10000 selection-sort   19999000   5.896045 shaker-s	Reversed	2000 insertion-sort	1999000	0.062021 merge-sort	10864	0.004654
Reversed   20000 insertion-sort   199990000   6.075681 merge-sort   139216   0.044046     Reversed   1000 quick-sort   8135   0.000364 radix-sort   10029   0.000334     Reversed   2000 quick-sort   18262   0.000682 radix-sort   26039   0.000566     Reversed   5000 quick-sort   52127   0.001469 radix-sort   65039   0.001398     Reversed   10000 quick-sort   114243   0.003443 radix-sort   130039   0.002773     Reversed   20000 quick-sort   248473   0.007144 radix-sort   320049   0.007085     Reversed   1000 selection-sort   499500   0.014979 shaker-sort   499500   0.024681     Reversed   2000 selection-sort   1999000   0.377912 shaker-sort   12497500   0.615     Reversed   10000 selection-sort   49995000   1.484127 shaker-sort   49995000   2.468312     Reversed   20000 selection-sort   11716   0.000533   199990000   9.813412     Reversed   2000 shell-sort   26416   0.001268	Reversed	5000 insertion-sort	12497500	0.381045 merge-sort	29804	0.010995
Reversed1000 quick-sort81350.000364 radix-sort100290.000334Reversed2000 quick-sort182620.000682 radix-sort260390.000566Reversed5000 quick-sort521270.001469 radix-sort650390.001398Reversed10000 quick-sort1142430.003443 radix-sort1300390.002773Reversed20000 quick-sort2484730.007144 radix-sort3200490.007085Reversed1000 selection-sort4995000.014979 shaker-sort4995000.024681Reversed2000 selection-sort19990000.06092 shaker-sort19990000.097879Reversed5000 selection-sort124975000.377912 shaker-sort124975000.615Reversed10000 selection-sort499950001.484127 shaker-sort499950002.468312Reversed20000 selection-sort117160.000533199990009.813412Reversed2000 shell-sort264160.001268Reversed5000 shell-sort787980.002734Reversed10000 shell-sort1725780.005406	Reversed	10000 insertion-sort	49995000	1.517119 merge-sort	64608	0.021525
Reversed   2000 quick-sort   18262   0.000682 radix-sort   26039   0.000566     Reversed   5000 quick-sort   52127   0.001469 radix-sort   65039   0.001398     Reversed   10000 quick-sort   114243   0.003443 radix-sort   130039   0.002773     Reversed   20000 quick-sort   248473   0.007144 radix-sort   320049   0.007085     Reversed   1000 selection-sort   499500   0.014979 shaker-sort   499500   0.024681     Reversed   2000 selection-sort   1999000   0.06092 shaker-sort   1999000   0.097879     Reversed   5000 selection-sort   12497500   0.377912 shaker-sort   12497500   0.615     Reversed   10000 selection-sort   49995000   1.484127 shaker-sort   49995000   2.468312     Reversed   20000 selection-sort   19999000   5.896045 shaker-sort   199990000   9.813412     Reversed   1000 shell-sort   11716   0.000533   199990000   9.813412     Reversed   5000 shell-sort   78798   0.002734 <t< td=""><td>Reversed</td><td>20000 insertion-sort</td><td>199990000</td><td>6.075681 merge-sort</td><td>139216</td><td>0.044046</td></t<>	Reversed	20000 insertion-sort	199990000	6.075681 merge-sort	139216	0.044046
Reversed   5000 quick-sort   52127   0.001469 radix-sort   65039   0.001398     Reversed   10000 quick-sort   114243   0.003443 radix-sort   130039   0.002773     Reversed   20000 quick-sort   248473   0.007144 radix-sort   320049   0.007085     Reversed   1000 selection-sort   499500   0.014979 shaker-sort   499500   0.024681     Reversed   2000 selection-sort   1999000   0.06092 shaker-sort   1999000   0.097879     Reversed   5000 selection-sort   12497500   0.377912 shaker-sort   12497500   0.615     Reversed   10000 selection-sort   49995000   1.484127 shaker-sort   49995000   2.468312     Reversed   20000 selection-sort   19999000   5.896045 shaker-sort   19999000   9.813412     Reversed   1000 shell-sort   26416   0.000533   10000 shell-sort   26416   0.002734     Reversed   5000 shell-sort   78798   0.002734   10000 shell-sort   172578   0.005406	Reversed	1000 quick-sort	8135	0.000364 radix-sort	10029	0.000334
Reversed10000 quick-sort1142430.003443 radix-sort1300390.002773Reversed20000 quick-sort2484730.007144 radix-sort3200490.007085Reversed1000 selection-sort4995000.014979 shaker-sort4995000.024681Reversed2000 selection-sort19990000.06092 shaker-sort19990000.097879Reversed5000 selection-sort124975000.377912 shaker-sort124975000.615Reversed10000 selection-sort499950001.484127 shaker-sort499950002.468312Reversed20000 selection-sort1999900005.896045 shaker-sort1999900009.813412Reversed1000 shell-sort117160.000533Reversed2000 shell-sort264160.001268Reversed5000 shell-sort787980.002734Reversed10000 shell-sort1725780.005406	Reversed	2000 quick-sort	18262	0.000682 radix-sort	26039	0.000566
Reversed20000 quick-sort2484730.007144 radix-sort3200490.007085Reversed1000 selection-sort4995000.014979 shaker-sort4995000.024681Reversed2000 selection-sort19990000.06092 shaker-sort19990000.097879Reversed5000 selection-sort124975000.377912 shaker-sort124975000.615Reversed10000 selection-sort499950001.484127 shaker-sort499950002.468312Reversed20000 selection-sort1999900005.896045 shaker-sort1999900009.813412Reversed1000 shell-sort117160.000533Reversed2000 shell-sort264160.001268Reversed5000 shell-sort787980.002734Reversed10000 shell-sort1725780.005406	Reversed	5000 quick-sort	52127	0.001469 radix-sort	65039	0.001398
Reversed1000 selection-sort4995000.014979 shaker-sort4995000.024681Reversed2000 selection-sort19990000.06092 shaker-sort19990000.097879Reversed5000 selection-sort124975000.377912 shaker-sort124975000.615Reversed10000 selection-sort499950001.484127 shaker-sort499950002.468312Reversed20000 selection-sort1999900005.896045 shaker-sort1999900009.813412Reversed1000 shell-sort117160.000533Reversed2000 shell-sort264160.001268Reversed5000 shell-sort787980.002734Reversed10000 shell-sort1725780.005406	Reversed	10000 quick-sort	114243	0.003443 radix-sort	130039	0.002773
Reversed   2000 selection-sort   1999000   0.06092 shaker-sort   1999000   0.097879     Reversed   5000 selection-sort   12497500   0.377912 shaker-sort   12497500   0.615     Reversed   10000 selection-sort   49995000   1.484127 shaker-sort   49995000   2.468312     Reversed   20000 selection-sort   199990000   5.896045 shaker-sort   199990000   9.813412     Reversed   1000 shell-sort   11716   0.000533   9.001268   9.001268     Reversed   5000 shell-sort   78798   0.002734   9.002734 </td <td>Reversed</td> <td>20000 quick-sort</td> <td>248473</td> <td>0.007144 radix-sort</td> <td>320049</td> <td>0.007085</td>	Reversed	20000 quick-sort	248473	0.007144 radix-sort	320049	0.007085
Reversed 5000 selection-sort 12497500 0.377912 shaker-sort 12497500 0.615   Reversed 10000 selection-sort 49995000 1.484127 shaker-sort 49995000 2.468312   Reversed 20000 selection-sort 199990000 5.896045 shaker-sort 199990000 9.813412   Reversed 1000 shell-sort 11716 0.000533   Reversed 2000 shell-sort 26416 0.001268   Reversed 5000 shell-sort 78798 0.002734   Reversed 10000 shell-sort 172578 0.005406	Reversed	1000 selection-sort	499500	0.014979 shaker-sort	499500	0.024681
Reversed 10000 selection-sort 49995000 1.484127 shaker-sort 49995000 2.468312   Reversed 20000 selection-sort 199990000 5.896045 shaker-sort 199990000 9.813412   Reversed 1000 shell-sort 11716 0.000533   Reversed 2000 shell-sort 26416 0.001268   Reversed 5000 shell-sort 78798 0.002734   Reversed 10000 shell-sort 172578 0.005406	Reversed	2000 selection-sort	1999000	0.06092 shaker-sort	1999000	0.097879
Reversed 20000 selection-sort 199990000 5.896045 shaker-sort 199990000 9.813412   Reversed 1000 shell-sort 11716 0.000533   Reversed 2000 shell-sort 26416 0.001268   Reversed 5000 shell-sort 78798 0.002734   Reversed 10000 shell-sort 172578 0.005406	Reversed	5000 selection-sort	12497500	0.377912 shaker-sort	12497500	0.615
Reversed 1000 shell-sort 11716 0.000533   Reversed 2000 shell-sort 26416 0.001268   Reversed 5000 shell-sort 78798 0.002734   Reversed 10000 shell-sort 172578 0.005406	Reversed	10000 selection-sort	49995000	1.484127 shaker-sort	49995000	2.468312
Reversed 2000 shell-sort 26416 0.001268   Reversed 5000 shell-sort 78798 0.002734   Reversed 10000 shell-sort 172578 0.005406	Reversed		199990000	5.896045 shaker-sort	199990000	9.813412
Reversed   5000 shell-sort   78798   0.002734     Reversed   10000 shell-sort   172578   0.005406	Reversed		11716	0.000533		
Reversed 10000 shell-sort 172578 0.005406						
Reversed 20000 shell-sort 375138 0.011795						
	Reversed	20000 shell-sort	375138	0.011795		

Sorted	1000 bubble-sort	499500	0.015591 counting-sort	1000	0.000086
Sorted	2000 bubble-sort	1999000	0.058844 counting-sort	2000	0.000216
Sorted	5000 bubble-sort	12497500	0.372954 counting-sort	5000	0.000352
Sorted	10000 bubble-sort	49995000	1.486207 counting-sort	10000	0.001014
Sorted	20000 bubble-sort	199990000	5.917201 counting-sort	20000	0.001811
Sorted	1000 flash-sort	1000	0.000132 heap-sort	17583	0.00107
Sorted	2000 flash-sort	2000	0.000308 heap-sort	39159	0.001756
Sorted	5000 flash-sort	5000	0.000597 heap-sort	112126	0.004727
Sorted	10000 flash-sort	10000	0.001208 heap-sort	244460	0.010879
Sorted	20000 flash-sort	20000	0.002559 heap-sort	529074	0.022918
Sorted	1000 insertion-sort	1998	0.00004 merge-sort	5044	0.001934
Sorted	2000 insertion-sort	3998	0.000118 merge-sort	11088	0.004375
Sorted	5000 insertion-sort	9998	0.000227 merge-sort	32004	0.01073
Sorted	10000 insertion-sort	19998	0.000499 merge-sort	69008	0.022001
Sorted	20000 insertion-sort	39998	0.000787 merge-sort	148016	0.044438
Sorted	1000 quick-sort	7987	0.00035 radix-sort	10029	0.000243
Sorted	2000 quick-sort	17964	0.000761 radix-sort	26039	0.000893
Sorted	5000 quick-sort	51822	0.001589 radix-sort	65039	0.001834
Sorted	10000 quick-sort	113631	0.003205 radix-sort	130039	0.003303
Sorted	20000 quick-sort	247248	0.007023 radix-sort	320049	0.007189
Sorted	1000 selection-sort	499500	0.015055 shaker-sort	499500	0.010749
Sorted	2000 selection-sort	1999000	0.061256 shaker-sort	1999000	0.041145
Sorted	5000 selection-sort	12497500	0.372466 shaker-sort	12497500	0.259499
Sorted	10000 selection-sort	49995000	1.496309 shaker-sort	49995000	1.03073
Sorted	20000 selection-sort	199990000	5.948124 shaker-sort	199990000	4.130996
Sorted	1000 shell-sort	8006	0.000272		
Sorted	2000 shell-sort	18006	0.000786		
Sorted	5000 shell-sort	55005	0.001648		
Sorted	10000 shell-sort	120005	0.003748		
Sorted	20000 shell-sort	260005	0.007841		















