

A (original)	1K	2K	4K	8K	16K	32K
Arrays.sort()	0.0	0.0	1.0	1.0	2.0	11.0
Bubble Sort	5.0	9.0	28.0	121.0	459.0	2181.0
Selection Sort	3.0	5.0	9.0	20.0	79.0	171.0
Insertion Sort	4.0	5.0	18.0	31.0	113.0	404.0
Quicksort	0.0	1.0	1.0	1.0	3.0	6.0

B (already sorte	1K	2K	4K	8K	16K	32K
Arrays.sort()	1.0	0.0	0.0	0.0	0.0	1.0
Bubble Sort	0.0	0.0	0.0	0.0	0.0	0.0
Selection Sort	0.0	0.0	0.0	0.0	0.0	0.0
Insertion Sort	2.0	2.0	11.0	25.0	95.0	375.0
Quicksort	0.0	0.0	1.0	0.0	1.0	1.0

C (reverse sorte	1K	2K	4K	8K	16K	32K
Arrays.sort()	0.0	0.0	1.0	1.0	1.0	3.0
Bubble Sort	2.0	7.0	22.0	74.0	285.0	1431.0
Selection Sort	1.0	4.0	9.0	25.0	105.0	380.0
Insertion Sort	1.0	2.0	9.0	17.0	67.0	289.0
Quicksort	0.0	0.0	0.0	2.0	1.0	1.0

D (almost sorted)	1K	2K	4K	8K	16K	32K
Arrays.sort()	0.0	0.0	7.0	0.0	0.0	8.0
Bubble Sort	1.0	1.0	6.0	25.0	124.0	509.0
Selection Sort	1.0	1.0	0.0	3.0	9.0	38.0
Insertion Sort	1.0	1.0	14.0	24.0	94.0	249.0
Quicksort	0.0	0.0	0.0	0.0	1.0	1.0

1M TOOK TOO LONG (2+ HOURS STILL RUNNING)

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PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 0 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 0 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 0
Arrays.sort() a 0.0 20220922_131728 jschiaiv .\Kints.txt Arrays.sort() b 0.0 20220922_131842 jschiaiv .\Kints.txt Arrays.sort() c 1.0 20220922_131919 jschiaiv .\Kints.txt
Arrays.sort() d 0.0 20220922_131728 jschiaiv .\Kints.txt Arrays.sort() e 0.0 20220922_131842 jschiaiv .\Kints.txt Arrays.sort() f 1.0 20220922_131919 jschiaiv .\Kints.txt
Arrays.sort() g 0.0 20220922_131728 jschiaiv .\Kints.txt Arrays.sort() h 0.0 20220922_131842 jschiaiv .\Kints.txt Arrays.sort() i 1.0 20220922_131919 jschiaiv .\Kints.txt
Successfully saved files.
PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 1 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 1 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 1
Bubble Sort a 5.0 20220922_131730 jschiaiv .\Kints.txt Bubble Sort b 9.0 20220922_131844 jschiaiv .\Kints.txt Bubble Sort c 28.0 20220922_131921 jschiaiv .\Kints.txt
Bubble Sort d 0.0 20220922_131730 jschiaiv .\Kints.txt Bubble Sort e 0.0 20220922_131844 jschiaiv .\Kints.txt Bubble Sort f 0.0 20220922_131921 jschiaiv .\Kints.txt
Bubble Sort g 2.0 20220922_131730 jschiaiv .\Kints.txt Bubble Sort h 7.0 20220922_131844 jschiaiv .\Kints.txt Bubble Sort i 22.0 20220922_131921 jschiaiv .\Kints.txt
Bubble Sort j 1.0 20220922_131730 jschiaiv .\Kints.txt Bubble Sort k 1.0 20220922_131844 jschiaiv .\Kints.txt Bubble Sort l 6.0 20220922_131921 jschiaiv .\Kints.txt
Successfully saved files.
PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 2 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 2 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 2
Selection Sort a 3.0 20220922_131731 jschiaiv .\Kints.txt Selection Sort b 5.0 20220922_131846 jschiaiv .\Kints.txt Selection Sort c 9.0 20220922_131922 jschiaiv .\Kints.txt
Selection Sort d 0.0 20220922_131731 jschiaiv .\Kints.txt Selection Sort e 0.0 20220922_131846 jschiaiv .\Kints.txt Selection Sort f 0.0 20220922_131922 jschiaiv .\Kints.txt
Selection Sort g 2.0 20220922_131731 jschiaiv .\Kints.txt Selection Sort h 4.0 20220922_131846 jschiaiv .\Kints.txt Selection Sort i 9.0 20220922_131922 jschiaiv .\Kints.txt
Selection Sort j 1.0 20220922_131731 jschiaiv .\Kints.txt Selection Sort k 1.0 20220922_131846 jschiaiv .\Kints.txt Selection Sort l 6.0 20220922_131922 jschiaiv .\Kints.txt
Successfully saved files.
PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 3 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 3 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 3
Insertion Sort a 4.0 20220922_131733 jschiaiv .\Kints.txt Insertion Sort b 5.0 20220922_131848 jschiaiv .\Kints.txt Insertion Sort c 18.0 20220922_131923 jschiaiv .\Kints.txt
Insertion Sort d 2.0 20220922_131733 jschiaiv .\Kints.txt Insertion Sort e 2.0 20220922_131848 jschiaiv .\Kints.txt Insertion Sort f 11.0 20220922_131923 jschiaiv .\Kints.txt
Insertion Sort g 1.0 20220922_131733 jschiaiv .\Kints.txt Insertion Sort h 2.0 20220922_131848 jschiaiv .\Kints.txt Insertion Sort i 9.0 20220922_131923 jschiaiv .\Kints.txt
Insertion Sort j 1.0 20220922_131733 jschiaiv .\Kints.txt Insertion Sort k 1.0 20220922_131848 jschiaiv .\Kints.txt Insertion Sort l 14.0 20220922_131923 jschiaiv .\Kints.txt
Successfully saved files.
PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 5 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 5 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 5
Quicksort a 0.0 20220922_131735 jschiaiv .\Kints.txt Quicksort b 0.0 20220922_131850 jschiaiv .\Kints.txt Quicksort c 1.0 20220922_131924 jschiaiv .\Kints.txt
Quicksort d 0.0 20220922_131735 jschiaiv .\Kints.txt Quicksort e 0.0 20220922_131850 jschiaiv .\Kints.txt Quicksort f 0.0 20220922_131924 jschiaiv .\Kints.txt
Quicksort g 0.0 20220922_131735 jschiaiv .\Kints.txt Quicksort h 0.0 20220922_131850 jschiaiv .\Kints.txt Quicksort i 1.0 20220922_131924 jschiaiv .\Kints.txt
Quicksort j 0.0 20220922_131735 jschiaiv .\Kints.txt Quicksort k 0.0 20220922_131850 jschiaiv .\Kints.txt Quicksort l 0.0 20220922_131924 jschiaiv .\Kints.txt
Successfully saved files.
PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 6 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 6 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 6
Arrays.sort() a 1.0 20220922_131955 jschiaiv .\Kints.txt Arrays.sort() b 2.0 20220922_132026 jschiaiv .\Kints.txt Arrays.sort() c 11.0 20220922_132054 jschiaiv .\Kints.txt
Arrays.sort() d 0.0 20220922_131955 jschiaiv .\Kints.txt Arrays.sort() e 0.0 20220922_132026 jschiaiv .\Kints.txt Arrays.sort() f 1.0 20220922_132054 jschiaiv .\Kints.txt
Arrays.sort() g 1.0 20220922_131955 jschiaiv .\Kints.txt Arrays.sort() h 1.0 20220922_132026 jschiaiv .\Kints.txt Arrays.sort() i 1.0 20220922_132054 jschiaiv .\Kints.txt
Arrays.sort() j 0.0 20220922_131955 jschiaiv .\Kints.txt Arrays.sort() k 2.0 20220922_132026 jschiaiv .\Kints.txt Arrays.sort() l 8.0 20220922_132054 jschiaiv .\Kints.txt
Successfully saved files.
PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 1 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 1 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 1
Bubble Sort a 121.0 20220922_131957 jschiaiv .\Kints.txt Bubble Sort b 459.0 20220922_132028 jschiaiv .\Kints.txt Bubble Sort c 2181.0 20220922_132100 jschiaiv .\Kints.txt
Bubble Sort d 0.0 20220922_131957 jschiaiv .\Kints.txt Bubble Sort e 0.0 20220922_132028 jschiaiv .\Kints.txt Bubble Sort f 0.0 20220922_132100 jschiaiv .\Kints.txt
Bubble Sort g 74.0 20220922_131957 jschiaiv .\Kints.txt Bubble Sort h 285.0 20220922_132028 jschiaiv .\Kints.txt Bubble Sort i 1431.0 20220922_132100 jschiaiv .\Kints.txt
Bubble Sort j 25.0 20220922_131957 jschiaiv .\Kints.txt Bubble Sort k 124.0 20220922_132028 jschiaiv .\Kints.txt Bubble Sort l 509.0 20220922_132100 jschiaiv .\Kints.txt
Successfully saved files.
PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 2 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 2 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 2
Selection Sort a 20.0 20220922_131959 jschiaiv .\Kints.txt Selection Sort b 79.0 20220922_132029 jschiaiv .\Kints.txt Selection Sort c 375.0 20220922_132101 jschiaiv .\Kints.txt
Selection Sort d 0.0 20220922_131959 jschiaiv .\Kints.txt Selection Sort e 0.0 20220922_132029 jschiaiv .\Kints.txt Selection Sort f 0.0 20220922_132101 jschiaiv .\Kints.txt
Selection Sort g 25.0 20220922_131959 jschiaiv .\Kints.txt Selection Sort h 105.0 20220922_132029 jschiaiv .\Kints.txt Selection Sort i 380.0 20220922_132101 jschiaiv .\Kints.txt
Selection Sort j 3.0 20220922_131959 jschiaiv .\Kints.txt Selection Sort k 9.0 20220922_132029 jschiaiv .\Kints.txt Selection Sort l 38.0 20220922_132101 jschiaiv .\Kints.txt
Successfully saved files.
PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 3 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 3 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 3
Insertion Sort a 31.0 20220922_132000 jschiaiv .\Kints.txt Insertion Sort b 113.0 20220922_132031 jschiaiv .\Kints.txt Insertion Sort c 404.0 20220922_132102 jschiaiv .\Kints.txt
Insertion Sort d 25.0 20220922_132000 jschiaiv .\Kints.txt Insertion Sort e 95.0 20220922_132031 jschiaiv .\Kints.txt Insertion Sort f 375.0 20220922_132102 jschiaiv .\Kints.txt
Insertion Sort g 17.0 20220922_132000 jschiaiv .\Kints.txt Insertion Sort h 67.0 20220922_132031 jschiaiv .\Kints.txt Insertion Sort i 289.0 20220922_132102 jschiaiv .\Kints.txt
Insertion Sort j 24.0 20220922_132000 jschiaiv .\Kints.txt Insertion Sort k 94.0 20220922_132031 jschiaiv .\Kints.txt Insertion Sort l 249.0 20220922_132102 jschiaiv .\Kints.txt
Successfully saved files.
PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 4 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 4 PS C:\Users\Joshua Schiav\Documents\School\F22\CSC 172\Lab8\Lab7> java Sorting .\Kints.txt 4
Quicksort a 1.0 20220922_132001 jschiaiv .\Kints.txt Quicksort b 1.0 20220922_132032 jschiaiv .\Kints.txt Quicksort c 1.0 20220922_132103 jschiaiv .\Kints.txt
Quicksort d 0.0 20220922_132001 jschiaiv .\Kints.txt Quicksort e 1.0 20220922_132032 jschiaiv .\Kints.txt Quicksort f 1.0 20220922_132103 jschiaiv .\Kints.txt
Quicksort g 0.0 20220922_132001 jschiaiv .\Kints.txt Quicksort h 1.0 20220922_132032 jschiaiv .\Kints.txt Quicksort i 1.0 20220922_132103 jschiaiv .\Kints.txt
Quicksort j 0.0 20220922_132001 jschiaiv .\Kints.txt Quicksort k 1.0 20220922_132032 jschiaiv .\Kints.txt Quicksort l 1.0 20220922_132103 jschiaiv .\Kints.txt
Successfully saved files.
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