

Seed: 21

Algorithm: BubbleSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 973
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 32 Microseconds: 32383
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 123 Microseconds: 123369
- Size: 50000 Execution Time => Seconds: 5 Miliseconds: 5030 Microseconds: 5030716
- Size: 100000 Execution Time => Seconds: 21 Miliseconds: 21624 Microseconds: 21624236

Algorithm: SelectionSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 728
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 23 Microseconds: 23104
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 92 Microseconds: 92376
- Size: 50000 Execution Time => Seconds: 2 Miliseconds: 2290 Microseconds: 2290249
- Size: 100000 Execution Time => Seconds: 9 Miliseconds: 9227 Microseconds: 9227423

Algorithm: QuickSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 99
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 463
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 1 Microseconds: 1015
- Size: 50000 Execution Time => Seconds: 0 Miliseconds: 6 Microseconds: 6165
- Size: 100000 Execution Time => Seconds: 0 Miliseconds: 13 Microseconds: 13386

Algorithm: MergeSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 105
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 481
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 1 Microseconds: 1018
- Size: 50000 Execution Time => Seconds: 0 Miliseconds: 5 Microseconds: 5820
- Size: 100000 Execution Time => Seconds: 0 Miliseconds: 12 Microseconds: 12250

Seed: 1

Algorithm: BubbleSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 354
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 30 Microseconds: 30397
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 127 Microseconds: 127693
- Size: 50000 Execution Time => Seconds: 5 Miliseconds: 5254 Microseconds: 5254236
- Size: 100000 Execution Time => Seconds: 22 Miliseconds: 22403 Microseconds: 22403393

Algorithm: SelectionSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 269
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 23 Microseconds: 23524
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 91 Microseconds: 91978
- Size: 50000 Execution Time => Seconds: 2 Miliseconds: 2313 Microseconds: 2313786
- Size: 100000 Execution Time => Seconds: 9 Miliseconds: 9409 Microseconds: 9409887

Algorithm: QuickSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 44
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 460
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 1 Microseconds: 1070
- Size: 50000 Execution Time => Seconds: 0 Miliseconds: 6 Microseconds: 6947
- Size: 100000 Execution Time => Seconds: 0 Miliseconds: 13 Microseconds: 13577

Algorithm: MergeSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 40
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 452
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 1 Microseconds: 1049
- Size: 50000 Execution Time => Seconds: 0 Miliseconds: 5 Microseconds: 5789
- Size: 100000 Execution Time => Seconds: 0 Miliseconds: 12 Microseconds: 12599

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Algorithm: BubbleSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 348
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 30 Microseconds: 30511

- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 129 Microseconds: 129677
- Size: 50000 Execution Time => Seconds: 5 Miliseconds: 5485 Microseconds: 5485316
- Size: 100000 Execution Time => Seconds: 22 Miliseconds: 22775 Microseconds: 22775931

Algorithm: SelectionSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 268
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 24 Microseconds: 24097
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 97 Microseconds: 97088
- Size: 50000 Execution Time => Seconds: 2 Miliseconds: 2352 Microseconds: 2352977
- Size: 100000 Execution Time => Seconds: 9 Miliseconds: 9509 Microseconds: 9509118

Algorithm: QuickSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 36
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 511
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 1 Microseconds: 1102
- Size: 50000 Execution Time => Seconds: 0 Miliseconds: 6 Microseconds: 6448
- Size: 100000 Execution Time => Seconds: 0 Miliseconds: 13 Microseconds: 13827

Algorithm: MergeSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 41
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 480
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 1 Microseconds: 1085
- Size: 50000 Execution Time => Seconds: 0 Miliseconds: 6 Microseconds: 6033
- Size: 100000 Execution Time => Seconds: 0 Miliseconds: 12 Microseconds: 12390

Favorable Case:

Algorithm: BubbleSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 236
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 21 Microseconds: 21623
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 85 Microseconds: 85734
- Size: 50000 Execution Time => Seconds: 2 Miliseconds: 2166 Microseconds: 2166049
- Size: 100000 Execution Time => Seconds: 8 Miliseconds: 8717 Microseconds: 8717117

Algorithm: SelectionSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 262
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 23 Microseconds: 23753
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 95 Microseconds: 95211
- Size: 50000 Execution Time => Seconds: 2 Miliseconds: 2338 Microseconds: 2338841
- Size: 100000 Execution Time => Seconds: 9 Miliseconds: 9510 Microseconds: 9510341

Algorithm: QuickSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 97
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 9 Microseconds: 9170
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 33 Microseconds: 33903
- Size: 50000 Execution Time => Seconds: 0 Miliseconds: 814 Microseconds: 814487
- Size: 100000 Execution Time => Seconds: 4 Miliseconds: 4250 Microseconds: 4250628

Algorithm: MergeSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 27
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 293
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 641
- Size: 50000 Execution Time => Seconds: 0 Miliseconds: 3 Microseconds: 3519
- Size: 100000 Execution Time => Seconds: 0 Miliseconds: 8 Microseconds: 8406

Unfavorable Case:

Algorithm: BubbleSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 435
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 42 Microseconds: 42398
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 160 Microseconds: 160382
- Size: 50000 Execution Time => Seconds: 3 Miliseconds: 3762 Microseconds: 3762648
- Size: 100000 Execution Time => Seconds: 14 Miliseconds: 14991 Microseconds: 14991956

Algorithm: SelectionSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 280

- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 24 Microseconds: 24719
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 91 Microseconds: 91025
- Size: 50000 Execution Time => Seconds: 2 Miliseconds: 2126 Microseconds: 2126765
- Size: 100000 Execution Time => Seconds: 8 Miliseconds: 8492 Microseconds: 8492889

Algorithm: QuickSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 572
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 52 Microseconds: 52369
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 194 Microseconds: 194086
- Size: 50000 Execution Time => Seconds: 4 Miliseconds: 4782 Microseconds: 4782342
- Size: 100000 Execution Time => Seconds: 19 Miliseconds: 19363 Microseconds: 19363119

Algorithm: MergeSort

- Size: 500 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 25
- Size: 5000 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 304
- Size: 10000 Execution Time => Seconds: 0 Miliseconds: 0 Microseconds: 598
- Size: 50000 Execution Time => Seconds: 0 Miliseconds: 3 Microseconds: 3476
- Size: 100000 Execution Time => Seconds: 0 Miliseconds: 7 Microseconds: 7272