

	QuickSort	Merge Sort	Insertion Sort
A descending sorted array with 1000 elements	0.034078359603881836 second(s)	0.0019996166229248047 second(s)	0.027089595794677734 second(s)
An ascending sorted array with 1000 elements	0.032119035720825195 second(s)	0.0020003318786621094 second(s)	0.028135299682617188 second(s)
A randomly generated array with 1000	0.0011200904846191406 second(s)	0.0019998550415039062 second(s)	0.014070749282836914 second(s)
A randomly generated array with 10000 elements	0.011122703552246094 second(s)	0.02608633041381836 second(s)	1.478686809539795 second(s)

-----Showcasing Merge Sort-----

Making sure that merge sort works correctly

Original Array: [0, 6, 0, 3, 7, 6, 9, 7, 6, 4]

Sorted Array: [0, 0, 3, 4, 6, 6, 6, 7, 7, 9]

----Running time analysis----

1. A descending sorted array with 1000 elements took: 0.0019996166229248047 second(s).
2. A descending sorted array with 1000 elements took: 0.0020003318786621094 second(s).
3. A randomly generated array with 1000 elements took: 0.0019998550415039062 second(s).
4. A randomly generated array with 10000 elements took: 0.02608633041381836 second(s).

-----Showcasing QuickSort-----

Making sure that Quick sort works correctly

Original Array: [8, 3, 10, 7, 7, 9, 4, 10, 7, 1]

Sorted Array: [1, 3, 4, 7, 7, 7, 8, 9, 10, 10]

----Running time analysis----

1. A descending sorted array with 1000 elements took: 0.034078359603881836 second(s).
2. A descending sorted array with 1000 elements took: 0.032119035720825195 second(s).
3. A randomly generated array with 1000 elements took: 0.0011200904846191406 second(s).
4. A randomly generated array with 10000 elements took: 0.011122703552246094 second(s).

-----Showcasing InsertionSort-----

Making sure that Insertion sort works correctly

Original Array: [4, 1, 3, 7, 6, 4, 9, 3, 9, 10]

Sorted Array: [1, 3, 3, 4, 4, 6, 7, 9, 9, 10]

----Running time analysis----

1. A descending sorted array with 1000 elements took: 0.027089595794677734 second(s).
2. A descending sorted array with 1000 elements took: 0.028135299682617188 second(s).
3. A randomly generated array with 1000 elements took: 0.014070749282836914 second(s).
4. A randomly generated array with 10000 elements took: 1.478686809539795 second(s).

