

	inplace?	stable?	worst?	average?	best	remarks
selection	✓		$n^2/2$	$n^2/2$	$n^2/2$	N exchanges
insertion	✓	✓	$n^2/2$	$n^2/4$	N	use for small N or partially ordered
shell	✓		?	?	N	tight code, subquadratic
merge		✓	$N \lg N$	$N \lg N$	$N \lg N$	$N \log N$ guarantee, stable
quick	✓		$n^2/2$	$2N \ln N$	$N \lg N$	$N \log n$ probabilistic guarantee fastest in practice
3-way quick	✓		$n^2/2$	$2 N \ln N$	N	improves quicksort in presence of duplicate keys
heapsort	✓		$2 N \lg N$	$2 N \lg N$	$N \lg N$	$N \log N$ guarantee, in place
???	✓	✓	$N \lg N$	$N \lg N$	$N \lg N$	holy grail sorting.