

## Sorting summary

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	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	✓		$N^2 / 2$	$2 N \ln N$	$N \lg N$	$N \log N$ probabilistic guarantee fastest in practice
3-way quick	✓		$N^2 / 2$	$2 N \ln N$	$N$	improves quicksort in presence of duplicate keys
???	✓	✓	$N \lg N$	$N \lg N$	$N$	holy sorting grail