

Name	Place	Stable	Worst Case	Best Case
Bubble Sort	In place	Yes	N^2	N^2
Selection Sort	In place	No	N^2	N^2
Insertion Sort	In place	Yes	N^2	N
Merge Sort	Out of place	Yes	$N \lg n$	$N \lg n$
Quick Sort	In place	No	N^2	$N \lg n$
Heap Sort	In place	No	$N \lg n$	$N \lg n$

Name	Pre condition	Worst Case	Best Case
Linear Search	None	N	1
Binary Search	Sorted Array	$N \lg n$	1