

Comparison of Sorting Algorithms

Name	Time Complexity	Stable / Unstable
Bubble Sort	$O(n^2)$	Stable
Selection Sort	$O(n^2)$	Unstable
Insertion Sort	$O(n^2)$	Stable
Shell Sort	Depends on gap	Unstable
	Worst $O(n^2)$	
Merge Sort	$O(n \log n)$	Stable
Quick Sort	$O(n \log n)$	Unstable
Counting Sort	$O(n)$	Unstable