**Sorting Algorithms in JavaScript:**

Sorting algorithms are fundamental techniques used to rearrange elements in a list or array in a specific order, such as numerical or lexicographical order. They are essential in various applications for organizing and retrieving data efficiently.

**Bubble Sort:**

Bubble sort is a simple comparison-based sorting algorithm. It repeatedly steps through the list, compares adjacent elements, and swaps them if they are in the wrong order. This process is repeated until the list is sorted.

**Selection Sort:**

Selection sort divides the input list into two parts: a sorted portion and an unsorted portion. It repeatedly selects the smallest (or largest) element from the unsorted portion and swaps it with the first unsorted element. This process is repeated until the entire list is sorted.

**Insertion Sort:**

Insertion sort builds the final sorted array one element at a time by iteratively picking the next element and inserting it into the appropriate position within the sorted portion of the array. It shifts larger elements to make room for the inserted element.

**Merge Sort:**

Merge sort is a divide-and-conquer algorithm. It divides the input array into smaller subarrays, recursively sorts them, and then merges the sorted subarrays to produce the final sorted array. It is known for its stable sorting and efficient performance.

**Quick Sort:**

Quick sort is another divide-and-conquer algorithm that selects a pivot element and partitions the array around the pivot. It recursively sorts the subarrays on either side of the pivot until the entire array is sorted. It is often faster than other sorting algorithms for large datasets.