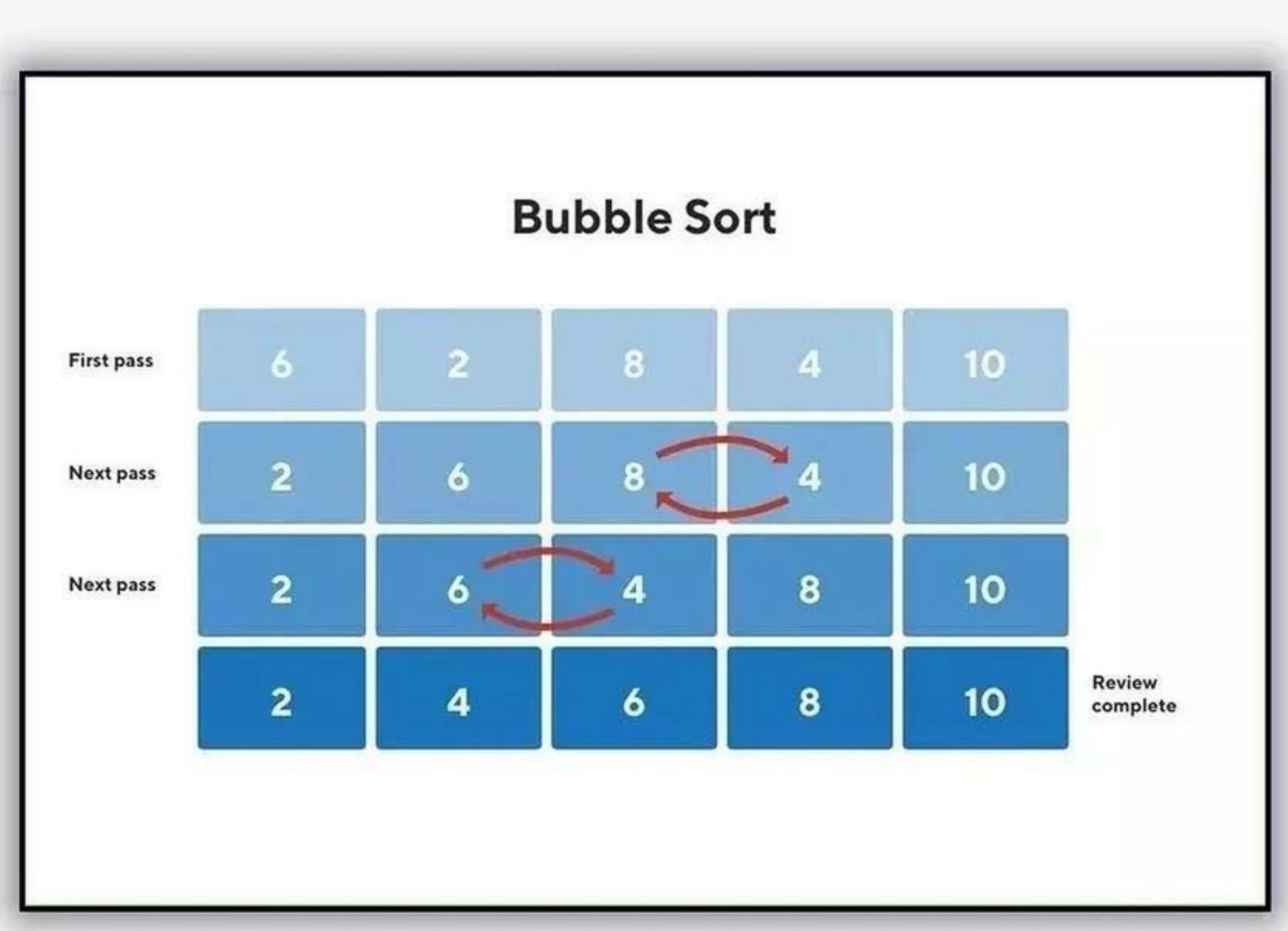
# Sorting Algorithms

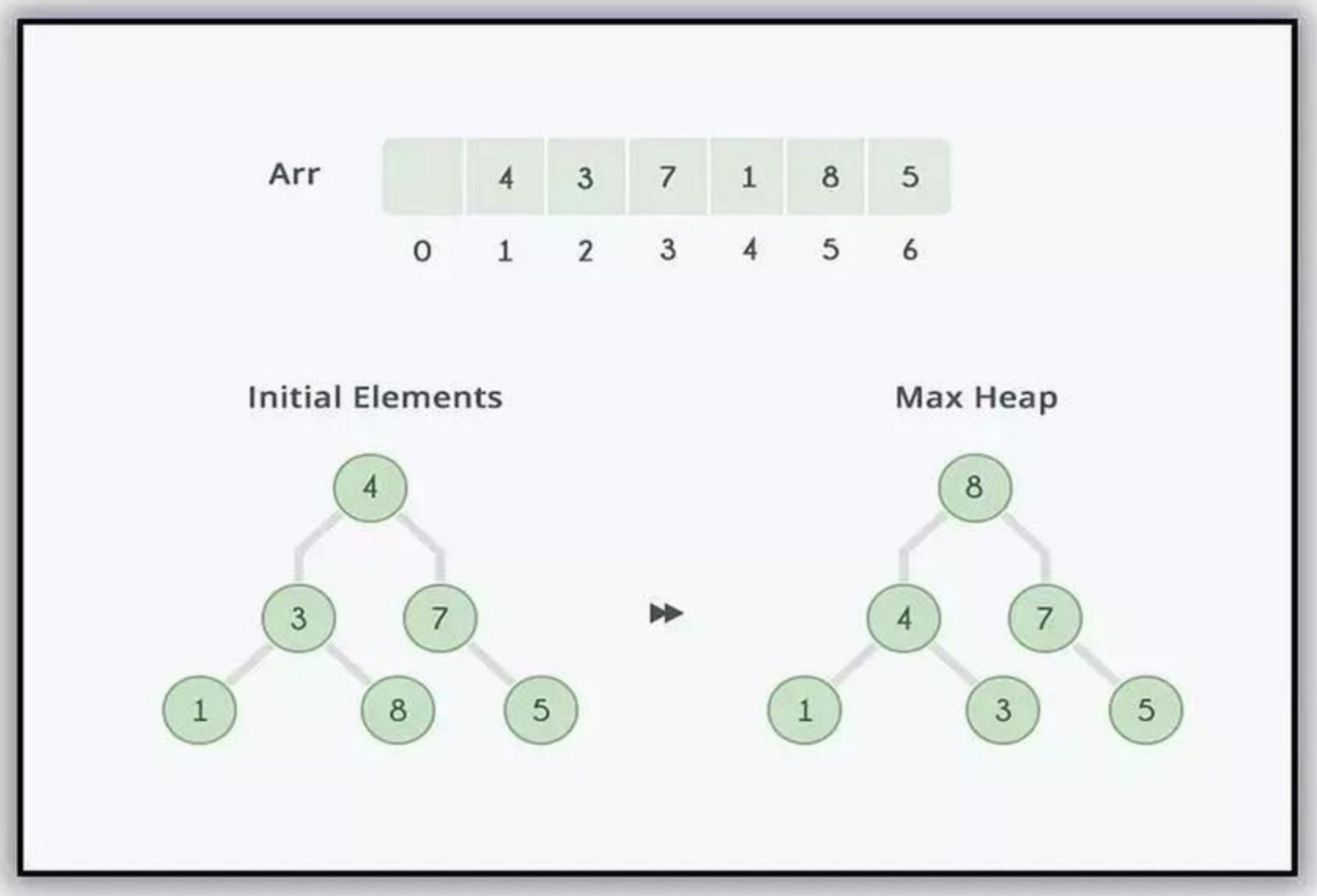
# Bubble Sort

Bubble sort is the simplest sorting algorithm that works by repeatedly swapping the adjacent elements if they are in the wrong order. This algorithm is not suitable for large data sets as its average and worst-case time complexities is quite high.



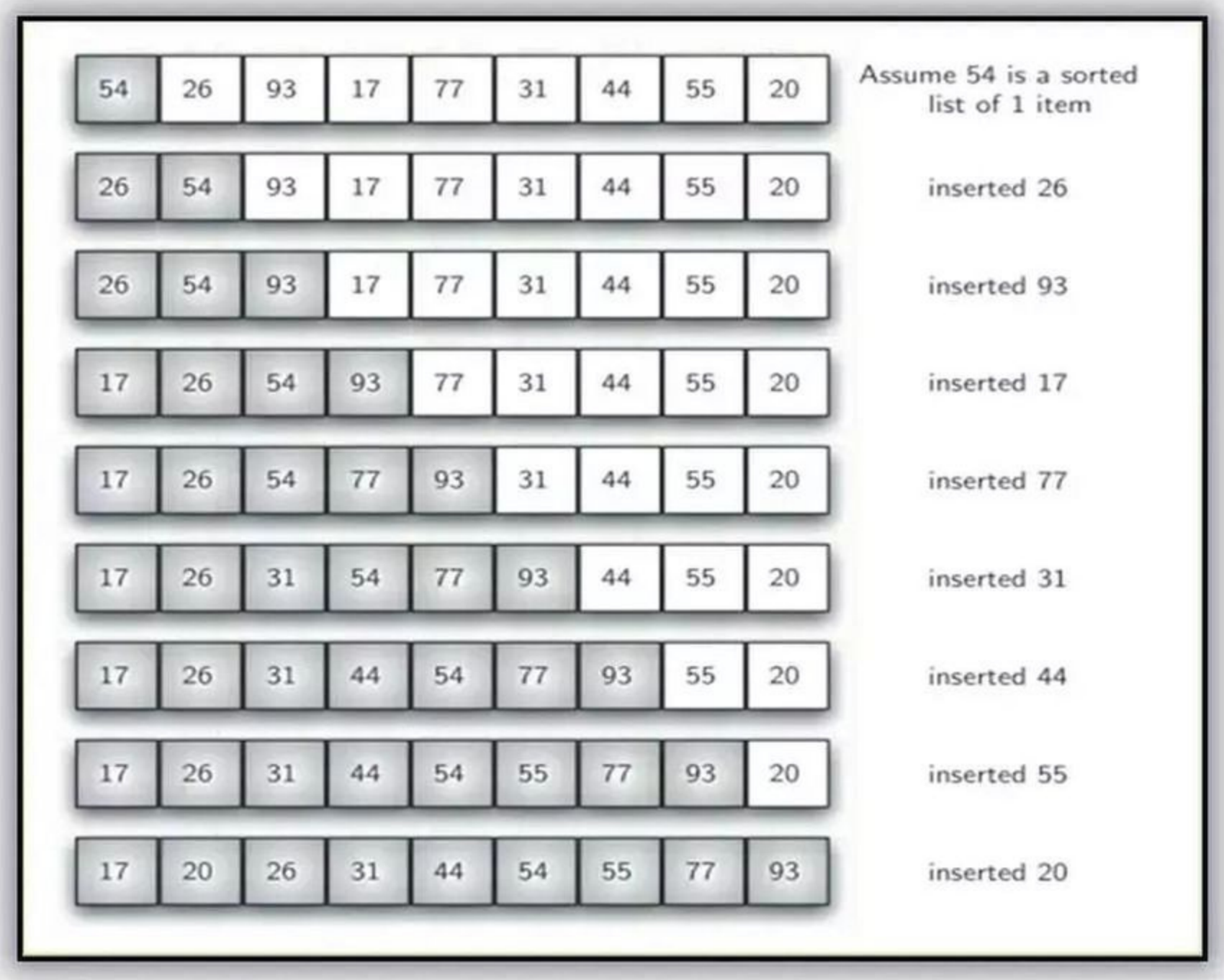
# Heap Sort

Heap sort is a comparison-based sorting technique based on Binary Heap data structure. It  is similar to the selection sort where we first find the minimum element and place the minimum element at the beginning. Repeat the same process for remaining elements.



# Insertion Sort

Insertion sort is a simple sorting algorithm that works similar to the way you sort playing cards in your hands The array is virtualy split into a sorted and an unsorted part. Values from the unsorted part are picked and placed at the correct position in the sorted part.



# Merge Sort

Merge Sort is a algorithm that is considered an example of the divide and conquer strategy. So, in this algorithm the array is initially divided into two equal halves and then they are combine in a sorted manner.