

MERGE SORT APPLICATIONS

- ▶ Useful for sorting linked lists.
- ▶ Can be used for random access in arrays as their elements are continuous.

HEAP SORT

- ▶ Comparison based sorting algorithm.
- ▶ Can be thought of as an improved selection sort.
- ▶ Divides input into sorted and unsorted sections and iteratively shrinks the unsorted region by extracting the largest element and moving it into the sorted list.
- ▶ Uses binary heap data structure rather than a linear time search.
- ▶ In place algorithm but not stable.
- ▶ Slightly slower than quick sort but a more favourable worst case time complexity scenario.