

MERGE SORT

- ▶ Efficient and general purpose.
- ▶ Comparison based sorting algorithm.
- ▶ Also operates on the divide and conquer rule.
- ▶ Stable sort.
- ▶ Used in external sorting.
- ▶ Time complexity - $O(n \log n)$.

MERGE SORT ALGORITHM

It divides input array in two halves, calls itself for the two halves and then merges the two sorted halves. **The merge() function** is used for merging two halves. The merge(arr, l, m, r) is key process that assumes that arr[l..m] and arr[m+1..r] are sorted and merges the two sorted sub-arrays into one.