

Analysis of Comparison Based Sorting Method

- In Comparison based sorting methods we compare each element of array and place it on its correct place.
- usually they have lower bound time complexity of $(n \log n)$.
- Bubble sort, Selection Sort, Insertion sort, Quick sort, Heap sort, Merge Sort are some of the examples

Definitions

- **Best Case:** It shows minimum number of time/recursions required to get output from given program.
- **Average Case:** Avg of best case and worse case.
- **Worst Case:** when the most number of time/recursions required to get output from given algorithm. Different algo have different series that can define its worse case.