INTERNAL AND EXTERNAL SORTING

INTERNAL SORTING

- Applied when the size of the data set is small enough to be implemented in the main memory.
- External memory not required.
- Examples: Bubble Sort, Insertion Sort, Quick Sort, Heap Sort.

EXTERNAL SORTING

- Designed to handle massive amounts of data.
- When the RAM space is insufficient, external hard drive memory is accessed.
- Examples: Merge Sort.

IN PLACE AND OUT OF PLACE

IN PLACE

- Aims to reduce memory usage.
- Overwrites input with output.
- An algorithm which is not in place is called out of place.
- In place examples: Quick Sort, Heap Sort, etc.
- Out of place examples: Merge Sort.