## **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.

## WHAT IS A HEAP?

## **HEAP: ORDERED BINARY TREE**