A heap is a tree-based data structure that can be implemented using an array. There are two types of heaps: min-heap and max-heap. In a min-heap, the value of a parent node is less than or equal to the values of its children. In a max-heap, the value of a parent node is greater than or equal to the values of its children.

Heaps are useful for implementing priority queues, where the element with the highest (or lowest) priority is always at the root of the tree.

Inserting and deleting elements from a heap can be done in logarithmic time (O(log n)). Searching for an element in a heap takes linear time (O(n)) in the worst case, but can be optimized to logarithmic time (O(log n)) for certain heap properties.

Traversing a heap is typically done by level, starting from the root node and visiting all the nodes at each level before moving to the next level.