- 1. Binary Tree (General-purpose)
- 2. Binary Search Tree (Sorted)



3. Quadtree



4. Heap (Partially sorted)



## 5. **B-Tree** (Balanced and sorted)



- 6. Red-Black Tree (Balanced and sorted with constraints)
  - 1) Each node is colored red or black.
  - 2) Root is black.
  - 3) Every leaf node contains no data and is black.
  - 4) Every leaf has same number of black ancestors.
  - 5) Every internal node has two children.
  - 6) Every red node has two black children.

