

1. Trees

- Children, Parent
- Degree: The number of children
- Siblings: Nodes with the same parent
- Leaf nodes: Degree of which equals 0
- Internal nodes: All other nodes
- Path: A sequence of edges between nodes
- Depth: Length of the path from root to a node
- Height: The maximum depth
- Ancestor, Descendant, "Strict" Ancestor/Descendent

2. Breadth-First Traversal

Implement with queue

3. Depth-First Traversal

Implement with stack

(Binary Tree) Preorder, Inorder, Postorder

4. Binary Tree

- Full node: Both left and right are non-empty trees
- Leaf nodes: 跟上面tree的一样
- Full binary tree: Each node is either full or leaf
- Run times of operations on binary tree
- Perfect binary tree

- Complete binary tree
- Left-child right-sibling binary tree
- (Forest)