

1. **Binary Tree Traversal** : Theory, 2 popular ways are :
  - a. **BFS** [Breadth First Search] Traversal = Level Wise Visit
  - b. **DFS** [Depth First Search] Traversal = Depth Wise Visit
2. **BFS Traversal** : Implementation, Queue is used for this.
3. **DFS Traversal** : Theory, Recursive definition,  $f(2)$  = sub tree of 2
4. **DFS Traversal Variants** :
  - a. Inorder [  $F(\text{Left}) + F(\text{root}) + F(\text{Right})$  ]
  - b. Preorder [  $F(\text{root}) + F(\text{Left}) + F(\text{Right})$  ]
  - c. Postorder [  $F(\text{Left})\_F(\text{Right}) + F(\text{root})$  ]
5. **Binary Tree Insertion**: insert can be done in many way  
Insert where a left/right child is empty (to make it **PERFECT**).
6. **Binary Tree Searching**: Using DFS