

Study Note3

tree + graphh

年級
TREE

In-out degree: 子節點數

TREE No limit

Binary TREE: only 2 children (left, Right)

Binary Search TREE: left edge ⊥ Right edge
in every subtree

DFT: Depth First Search / Travel (深度)

Preorder 中左右

Inorder: 左中右

Postorder 右左中

Level Order

BFT: Breath - First Search / Travel (廣度)

AVL Tree: Binary Search TREE + Balance height

Graph degree: 連邊數

In-degree: 進入這個 edge 數

Out-degree: 出去這個 edge 數

年級 姓名 座號 科目 日期

Graph 定義 $G(V, E)$

V : set of vertices (點)

E : set of connecting vertices

Space $\Theta(V^2)$

Traversal BFS/DFS $\Theta(V^2)$

Neighborhood iteration $\Theta(V)$

degree

In/out degree: 指向/導出的節點

Edge —

e
edge label

w →

Edge with weight and direction

Adjacency List / Matrix