

Data Structure 作業 2

(請寫計算過程, 一題 1 分)

姓名:

學號:

1. 依序輸入 6 筆資料, 劃出其 Binary Search Tree, 說明 A,B,C,D 哪一個高度最小?

(A) 10,20,30,40,50,60

(B) 30,20,50,40,10,60

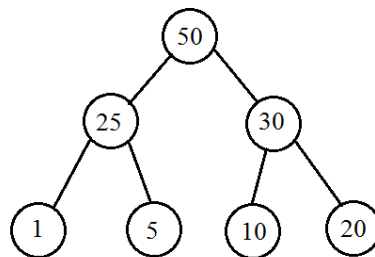
(C) 60,50,40,30,20,10

(D) 40,10,50,30,20,60

2. 請依序加入下列資料建立一棵 Complete binary tree, 再轉換成 Heap

3,7,1,6,2,8,4,5,9

3. 下列 Heap, 劃出刪除 50, 再刪除 30 後的 Heap



4. Show the final AVL tree after successively inserting the keys 2,7,8,1,3,6,4,5,9,10 into an initially empty AVL tree

5. Given a 2-3 tree in the following, draw the tree after deleting 70,90,60,95,20 in the given order. (Hint: a 2-3 tree is a B-tree of order 3)

