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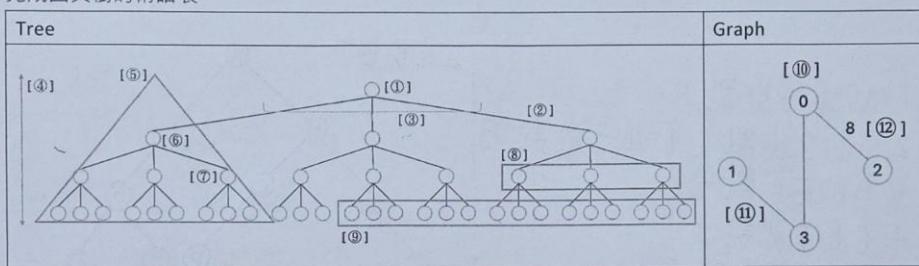
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Q1. (60 pts, 5pts each)

Graph & Tree Terminology.

完成圖與樹的術語表



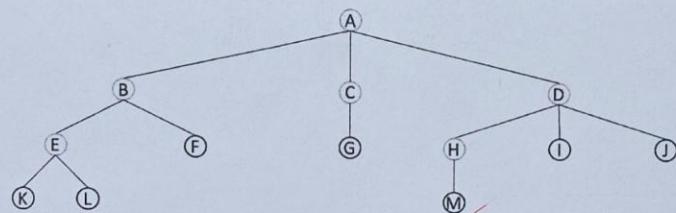
A1:

①	root	②	edge
③	廣度	④	深度
⑤	left subtree	⑥	parent
⑦	child	⑧	sibling
⑨	leaf	⑩	vertex (頂點)
⑪	edge	⑫	weight (權重)

Q2. (40 pts)

Convert the tree in the figure below into a degree-two (binary) tree, and describe the conversion process.

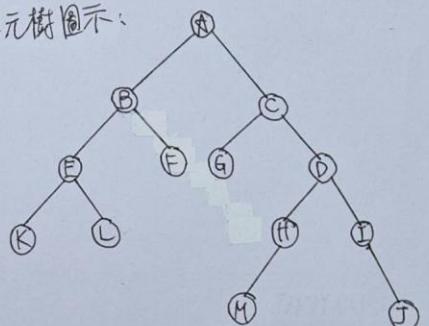
將下圖中的樹轉換成度(分支)為二的樹(二元樹)，並描述轉換過程。



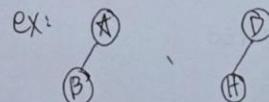
A2:

1. A 仍是根節點
2. B 的左節點是第一個子節點 E
3. B 的右節點是 C
4. C 的右節點是 D
5. B 的左節點是 E
6. E 的右節點是 F
7. B 的左節點是 K
8. E 的右節點是 L
- 9.

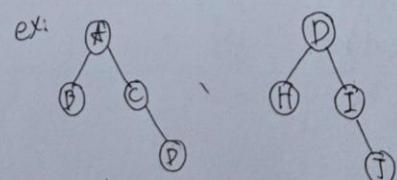
二元樹圖示：



Step 1: 只留第一個子節點



Step 2: 同層 sibling 用右指標連結



Step 3: 畫圖