

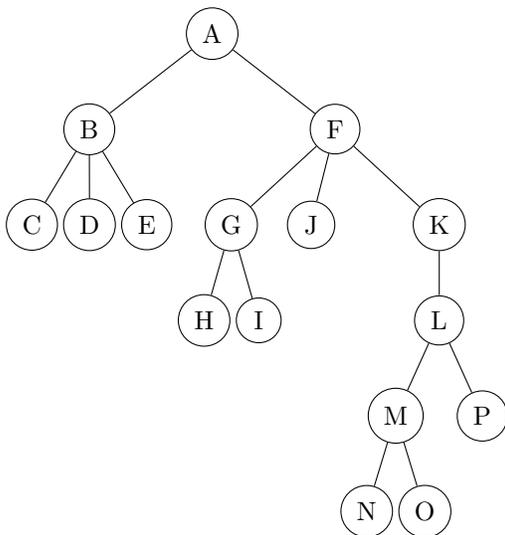
Today's topic: nearest common ancestors, review.

Next class: Continuing review of recent topics.

1. List the members of your group below. Underline your name.

2. For the tree depicted below, list the nodes in

- (a) Preorder:
- (b) Postorder:
- (c) Level-order:



3. For the tree of Question 2, list the nearest common ancestors (NCAs) of:

- (a) H and M:
- (b) C and G:
- (c) F and P:
- (d) D and N:

4. Using the convention of Figure 24.9 in the textbook, depict the *common-anchor sets* when the NCA algorithm operating on the tree of Question 2 is about to return from a recursive call on node O.

- Continuing with Question 4, Explain how the NCAs of pairs (I, O) , (H, L) , and (G, P) is computed.

Repeat Question 4 for all remaining recursive returns from recursive calls.

- Provide the conventional definition for $\log^* n$ and explain its relation to the Ackermann functions.