Today: Longest common subsequence (*diff*), dynamic programming contd.; §§ 15.4.
Next class: Quiz 1; dynamic programming wrap-up. §§ 15.*.
Reminders: Homework due soon. Read material *before and after* class. Use newsgroup.

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

2. Determine, using an arbitrary method, the *longest common subsequence (LCS)* of the two sequences below. Briefly explain why your answer is correct.

   ```
   Y A B A D A B A D A A B
   B Y A D A D D A B A Y
   ```

3. How many sequences (exact number) would be checked by the exhaustive enumeration algorithm (noted near the top of page 392 of the textbook)? Justify your answer.

4. Use the result of Question 6 to generate an *edit script* that edits the first sequence of Question 2 into the second. Describe your algorithm and explain why it is correct.

5. Trace the operation of the LCS-LENGTH algorithm (p. 394) on the sequences of Question 2. Depict the state of the b and c arrays (1) after four iterations of the outer nested loop and (2) at the end of the algorithm.

6. Trace the operation of the PRINT-LCS algorithm (p. 395) on the result of Question 5. Provide the arguments for each of recursive call of PRINT-LCS.