Today Divide and Conquer; recurrences. §§ 4.{1,2,3}.
Next class Solving recurrences; §§ 4.{3,4,5}.
Reminders Homework. Newsgroup. Reading. Coding. Practice. Don't fall behind.

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

2. Trace the execution of the FIND-MAX-CROSSING-SUBARRAY algorithm on the array
   A depicted below, with the arguments `low`, `mid`, and `high` equal to 1, 5, and 10,
   respectively.

i:	1	2	3	4	5	6	7	8	9	10
A[i]:	88	19	9	-66	-2	116	-56	-12	87	101

   List the values of *sum* and *left-sum* after each iteration of the first for-loop of the
   algorithm. Similarly, list the values of *sum* and *right-sum* after each iteration of the
   second for-loop.

3. Depict the recursion tree that outlines the recursive calls made by the FIND-MAXIMUM-SUBARRAY algorithm when invoked on the array of Question 2 (repeated below), with `low` and `high` equal to 1 and 10, respectively. The nodes of the tree should be labeled with the function invoked (FIND-MAXIMUM-SUBARRAY or FIND-MAX-CROSSING-SUBARRAY and the edges should connect each function's node to the node of its invoker.

i:	1	2	3	4	5	6	7	8	9	10
A[i]:	88	19	9	-66	-2	116	-56	-12	87	101

4. Provide an asymptotic solution (big Θ) for the following recurrence, which arose in Tuesday's quiz. Explain briefly.

$$S(n) = n^2 - n + S(n-2)$$