Today: Literate programming; an implementation of linear selection.[1].
Next class: Permutations in deployed code; impact of bugs. Rob Weir's blog entry on the topic[2] and related material. Bring hardcopies to class for reference.

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

2. Provide a simple linear-time algorithm for finding the 3rd and 7th smallest elements (together) of an array.

3. What tools were likely used to produce this program? Hint: See page headers.

4. Briefly explain the notation used on page 2 of the program. What does the 7 in ⟨*median5* 7⟩ denote? What does the notation (2) as used on the right of page 3 denote?

[1] Derrick Coetzee, An efficient implementation of Blum, Floyd, Pratt, Rivest, and Tarjan's worst-case linear selection algorithm, `http://moonflare.com/`, 2004.

[2] Rob Weir, Doing the Microsoft Shuffle: Algorithm Fail in Browser Ballot, `http://www.robweir.com/`, 2010.

5. Provide a replacement for ⟨*selectRandom*⟩ in a naive Java translation of the program, highlighting the differences.

6. Provide an alternate implementation of ⟨*selectRandom*⟩ in Java or C++ that is significantly different from those in the program and Question 5. Highlight the differences and their significance.

7. Critique the implementation of ⟨*select base case*⟩.