

## Problem Set 6: *Greedy Algorithms I*

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**Due: Thursday, February 27, 2014, at the beginning of class**

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1. (Ch. 16) Not just any greedy approach to the activity-selection problem produces a maximum-size set of mutually compatible activities. Give an example for each of the following that illustrate why these alternative greedy choices do not work:
  - a. Selecting activity of least duration from those that are compatible with previously selected activities
  - b. Selecting compatible activity that overlaps with the fewest other remaining activities
  - c. Selecting the compatible remaining activity with the earliest start time.
2. (Ch. 16) Work problem 16.2-4 (pages 427-248, “Professor Gecko...”)
3. (Ch. 16) Work exercise 16.3-3 on page 436 (“What is optimal Huffman code...”).