

Problem Set 6: *Greedy Algorithms I*

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

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...”).