As with the midterm, I will definitely ask some questions which test your knowledge of basic algorithms we’ve learned in the second half of the class and on the homework, including basic dynamic programming methods (like 2-way choice and knapsack), Bellman-Ford, max-flow / min-cut, bipartite matching, and all the methods we used for Number Partition on the programming assignments. With a partner, generate a representative small instance for these, and make sure your partner can correctly and quickly run the algorithm and generate the output. The algorithms covered on the midterm are also fair game. We will also surely have a problem involving an NP-completeness reduction. Below are some other good study problems for you to consider.

**Question 1.** Chapter 6, Problem 4.

**Question 2.** Chapter 6, Problem 7.

**Question 3.** Chapter 6, Problem 15. *(Too hard for the midterm, but good practice for studying purposes).*

**Question 4.** Chapter 7, Questions 2 and 3.

**Question 5.** Chapter 7, Question 15.

**Question 6.** Chapter 8, Question 2.

**Question 7.** Chapter 8, Question 9.

**Question 8.** Chapter 11, Question 2.