Q1. Exercise 16.1-4 in CLRS (Greedy approaches to activity selection).

Q2. Exercise 16.2-7 (Maximizing the payoff). You should use a greedy technique, and prove that it is correct. That is, you must show your greedy choice leads to a solution that is at least as maximal as any other solution. Remember, some of the integers in the sets may repeat.

Q3. Exercise 16.3-2 (Huffman codes for Fibonacci frequencies). Most of the credit for this problem is given for the correct generalization.

Q4. Problem 16-1 in CLRS (Coin changing).

Q5. Exercise 17.2-1 in CLRS (Stack with backups). Note, there is no Multipop operation for this stack, and that it costs $O(m)$ time to copy the stack if there are $m$ entries on the stack during the backup.

Q6. Exercise 17.3-4 in CLRS (Starting with elements already on the stack).

Q7. Exercise 17.3-7 in CLRS (Design a data structure). You must provide an analysis demonstrating that your data structure achieves the $O(m)$ time bound. Hint: You may find it useful to apply one of the linear time algorithms studied earlier in the course (and in particular, a result from one of your previous homeworks).

Q8. Exercise 17.4-2 in CLRS (Amortized deletion cost in a dynamic table).