Homework Assignment 6

This assignment is due by Thursday April 19 (in class). Assignments should be handed in before the class begins.

**Problem 1**: Solve exercises 11.2-2 (page 261), 17.2-1 (page 458), 17.4-2 (page 471), 19.2-1 (page 518), 19.4-1 (page 526), and 21.2-1 (page 567) in the textbook.

**Problem 2**: Solve exercise 11.3-5 (page 269) in the textbook.

**Hint**: Any hash function $h$ maps the $U$ keys into the $B$ bins. Fix any such $h$. For $i$ in $1 \ldots B$, let the number of keys mapped by $h$ into bin $i$ be $n_i$. How many pairs of keys have a collision for $h$? What is the arrangement of $n_i$'s that minimizes the number of collisions for $h$? Analyzing these quantities can help you solve the problem.