This homework is optional and will not be graded, but can give you some more practice with some of the hashing material.

1. CLRS 11.2-2 (pg. 229)
2. CLRS 11.3-1 (pg. 236)
3. CLRS 11.4-1 (pg. 244)
4. CLRS 11.4-2 (pg. 244)

5. Let $n = 1000$ be the number of items I plan on inserting into a hash table. I want the average number of accesses in a successful search to be about 2.0.

   (a) About how big should the array be if I use open addressing with linear probing?
   
   (b) About how big should the array be if I use chained hashing?