

**Algorithm Design**  
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**Solution of Exercise C-2.34**

When we remove an item from a hash table that uses linear probing without using deleted element markers, we need to rearrange the hash table contents so that it seems the removed item never existed. This action can be done by simple incrementally stepping forward through the table (much as we do when there are collisions) and moving back one spot each item  $k$  for which  $f(k)$  equals  $f(\text{removed item})$ . We continue walking through the table until we encounter the first item for which the  $f(k)$  value differs.