Reordering Algorithms Solutions

reverse()

- Describe the reverse algorithm function
  - reverse() takes the elements in an iterator range and reverses their order
- What arguments does reverse() take?
  - An iterator range
- Write a simple program that uses reverse()
- Write the equivalent code without using reverse()

rotate()

- Describe the rotate algorithm function
  - rotate() moves the elements in an iterator range around a "pivot"
  - The elements before the pivot are moved to the back of the range
  - The pivot and the elements before it are moved to the back of the range
- What arguments does rotate() take?
  - The beginning of the range to be rotated
  - An iterator to the pivot element
  - The end of the range
- What is the return value from rotate()?
  - An iterator to the element that was originally at the start of the range
- Write a simple program that uses rotate()

rotate_copy()

- Describe the rotate_copy algorithm function
  - rotate_copy() performs a rotate operation and writes the elements to a destination
- What arguments does rotate_copy() take?
  - The beginning of the range to be rotated
  - An iterator to the pivot element
  - The end of the range
  - An iterator to the destination
- What is the return value from rotate_copy()?
  - An iterator to the last element plus one that was written to the destination
- Write a simple program that uses rotate_copy()