# Chapter 12

**Sorting**

12.1 Sorting Revisited

12.2 Straight Selection Sort

Analyzing the Selection Sort.

12.3 Bubble Sort

Analyzing the Bubble Sort

12.4 Insertion Sort

Analyzing the Insertion Sort

12.5 O(N log2 N) Sorts

Merge Sort

Merging the Sorted Halves

The MergeSort Function

Analyzing the Merge Sort

Quick Sort

Heap Sort

Analyzing the Heap Sort

Testing

12.6 Efficiency and Other Considerations

When N Is Small

Eliminating Calls to Functions

Programmer Time

Space Considerations

Keys and Stability

Sorting with Pointers

Caching

12.7 Radix Sort

Analyzing the Radix Sort

12.8 Parallel Merge Sort

Summary

Exercises