**Chapter 8 Single-Dimensional Arrays**

8.1 Declaring and Instantiating Arrays

8.1.1 Declaring Arrays

8.1.2 Instantiating Arrays

8.1.3 Combining the Declaration and Instantiation of Arrays

8.1.4 Assigning Initial Values to Arrays

8.2 Accessing Array Elements

8.3 Aggregate Array Operations

8.3.1 Printing Array Elements

8.3.2 Reading Data into an Array

8.3.3 Summing the Elements of an Array

8.3.4 Finding Maximum or Minimum Values

8.3.5 Copying Arrays

8.3.6 Changing the Size of an Array

8.3.7 Comparing Arrays for Equality

8.3.8 Displaying Array Data as a Bar Chart

8.4 Programming Activity 1: Working with Arrays

8.5 Using Arrays in Classes

8.5.1 Using Arrays in User-Defined Classes

8.5.2 Retrieving Command Line Arguments

8.6 Searching and Sorting Arrays

8.6.1 Sequential Search of an Unsorted Array

8.6.2 Selection Sort

8.6.3 Insertion Sort

8.6.4 Sorting Arrays of Objects

8.6.5 Sequential Search of a Sorted Array

8.6.6 Binary Search of a Sorted Array

8.7 Programming Activity 2: Searching and Sorting

Arrays

8.8 Using Arrays as Counters

8.9 Accepting a Variable Number of Arguments