**Chapter 9**

**Knowledge Goals**

* To understand how two-dimensional arrays are structured and how they function.
* To learn how two-dimensional arrays are instantiated.
* To learn how to process the data in a two-dimensional array.
* To learn what an ArrayList is and how to use the ArrayList class.

**Skill Goals**

*To be able to:*

* Declare and instantiate a two-dimensional array.
* Assign initial values to a two-dimensional array.
* Process all elements of a two-dimensional array.
* Process a given row or column of a two-dimensional array.
* Display data in a two-dimensional array as a bar chart.
* Pass a two-dimensional array to a method.
* Receive a two-dimensional array as the return value of a method.
* Declare and instantiate an ArrayList.
* Call methods of an ArrayList to add, remove, or replace items in the list.
* Call methods of an ArrayList to clear the list, free extra space, or retrieve the number of items in the list.
* Use an enhanced for loop to process all elements of an ArrayList.