PROGRAMMING EXERCISES

1. Write a program named **IntArrayDemo** that stores an array of 10 integers. Until the user enters a sentinel value, allow the user three options: (1) to view the list in order from the first to last position, (2) to view the list in order from the last to first position, or (3) to choose a specific position to view.

2. Write a program named **TipsList** that accepts seven `double` values representing tips earned by a waiter each day during the week. Display each of the values along with a message that indicates how far it is from the average.

3. Write a program named **CheckZips** that is used by a package delivery service to check delivery areas. The program contains an array that holds the 10 zip codes to which the company delivers packages. Prompt a user to enter a zip code and display a message indicating whether the zip code is one to which the company delivers.

4. The Chat-A-While phone company provides service to six area codes and charges the per-minute rates for phone calls shown in the table below. Write a program named **ChatAWhile** that allows a user to enter an area code and the length of time for a call in minutes, and then display the total cost of the call.

Area Code	Per-Minute Rate ($)
262	0.07
414	0.10
608	0.05
715	0.16
815	0.24
920	0.14

5. a. Write a program named **PizzaPrices** that prompts the user to make a choice for a pizza size— *S*, *M*, *L*, or *X*—and then displays the price as $6.99, $8.99, $12.50, or $15.00, respectively.

   b. Create a program named **PizzaPrices2** that modifies the `PizzaPrices` program so that the following discounts apply: no discount for one pizza, 10 percent for two pizzas, 15 percent for three or four pizzas, and 20 percent for five or more pizzas. Display a full accounting of the transaction.

6. Write a program named **Commission** that computes commissions for automobile salespeople

based on the value of a car sold. Salespeople receive 5 percent of the sale price for any car sold for up to and including $15,000; 7 percent for any car over $15,000 up to and including $24,000; and 10 percent of the sale price of any car over $24,000. Write a program that allows a user to enter a car price. The output is the salesperson's commission.