Lab Exercise— Minimum

This problem is intended to be solved in a closed-lab session with a teaching assistant or instructor present. The problem is divided into six parts:

**1.** Lab Objectives

**2.** Description of the Problem

**3.** Sample Output

**4.** Program Template

**5.** Problem-Solving Tips

**6.** Follow-Up Question and Activity

The program template represents a complete working Java program, with one or more key lines of code replaced with comments. Read the problem description and examine the sample output; then study the template code. Using the problem-solving tips as a guide, replace the /\* \*/ comments with Java code. Compile and execute the program. Compare your output with the sample output provided.

**Lab Objectives**

This lab was designed to reinforce programming concepts from Chapter 6. In this lab, you will practice:

• Declaring and using methods.

• Using Math class methods.

The follow-up question and activity also will give you practice:

• Modifying methods to perform different actions.

**Description of the Problem**

Write a method minimum3 that returns the smallest of three floating-point numbers. Use the Math.min method to implement minimum3. Incorporate the method into an application that reads three values from the user, determines the smallest value and displays the result.

**Sample Output**

Enter first number: 4

Enter second number: 5

Enter third number: 6

Minimum is 4.000000

**Problem-Solving Tips**

**1.** Method minimum3 should receive three arguments of type double.

**2.** Method minumum3 should return a double.

**3.** In order to nest method calls to Math.min, place a method call to Math.min within the argument list of another call to Math.min. The return value of one Math.min method call will be used as an argument passed to the other call to method Math.min.

**4.** Be sure to follow the spacing and indentation conventions mentioned in the text.

**5.** If you have any questions as you proceed, ask me.

**Follow-Up Question and Activity**

1. Write a max method that returns the largest of the numbers
2. Write a sort method that displays the four values in ascending order
3. Modify the driver