Sample Solution Explanation

Problem Analysis: This exercise asks the user to enter two integers, compare them, and display appropriate messages to show which number is larger or equal if they are the same.

Solution: Open the file entitled ‘solution 6.17’ and examine the code. In this module, you are introduced how to use dialog boxes. We can use a window object called prompt dialog. It allows the user to enter a value. Lines #10-13 declare four variables: first, second, number1, and number2 respectively. Line #16 uses prompt dialog window to read input from the user. The value entered by the user is stored in a variable called first that was declared in line 10.

Note when we use prompt dialog window to obtain input from the user, it is returned as a string even if the user enters numbers such as 18. We cannot use strings for performing calculations. Hence, we must convert strings into numbers. Line #17 converts the value stored in variable named first into integer using parseInt function and assign it to the variable named number1

In the same way, second value is read using the prompt window and is stored in variable called second in line #20. In line #21, it is converted into integer and is assigned to the variable named number2. Now, variables number1 and number2 contain integer values and you can manipulate them as numbers for performing calculations.

Lines #23 and 24 use the if statement to determine if the content of the variable named number1 is greater than that of the content of the variable named number2. If the condition is true (met) then it will display a message using alert dialog window displaying the first number along with the text that it is larger.

Lines #26 and 27 compare the contents of variables number1 and number2 and if the content of the variable named number1 is smaller than that of number2, it will display the content of the variable number2 along with the text that it is larger.

Lines #29 and 30 compare the contents of two variables and display the appropriate message if both are equal.

Note: in chapter #7, you will learn how to use the if… else selection statement that will simply the code to compare the numbers.