**Chapter 2 Programming Building Blocks—Java Basics**

2.1 Java Application Structure

2.2 Data Types, Variables, and Constants

2.2.1 Declaring Variables

2.2.2 Integer Data Types

2.2.3 Floating-Point Data Types

2.2.4 Character Data Type

2.2.5 Boolean Data Type

2.2.6 The Assignment Operator, Initial Values, and Literals

2.2.7 *String* Literals and Escape Sequences

2.2.8 Constants

2.3 Expressions and Arithmetic Operators

2.3.1 The Assignment Operator and Expressions

2.3.2 Arithmetic Operators

2.3.3 Operator Precedence

2.3.4 Programming Activity 1: Converting Inches to Centimeters

2.3.5 Integer Division and Modulus

2.3.6 Division by Zero

2.3.7 Mixed-Type Arithmetic and Type Casting

2.3.8 Shortcut Operators

2.4 Programming Activity 2: Temperature Conversion