DEITEL
Exercises Chapter 2 Intro to C++ Programming

2.8 Fill in the blanks in each of the following:
a) _____ are used to document a program and improve its readability.
b) The object used to print information on the screen is _____ .
c) A C++ statement that makes a decision is _____ .
d) Most calculations are normally performed by _____ statements.
e) The _____ object inputs values from the keyboard.

2.10 State which of the following are *true* and which are *false*. If *false*, explain your answers.
a) C++ operators are evaluated from left to right.
b) The following are all valid variable names: _under_bar_, m928134, t5, j7, her_sales, his_account_total, a, b, c, z, z2.
c) The statement cout << "a = 5;"; is a typical example of an assignment statement.
d) A valid C++ arithmetic expression with no parentheses is evaluated from left to right.
e) The following are all invalid variable names: 3g, 87, 67h2, h22, 2h.

2.11 Fill in the blanks in each of the following:
a) What arithmetic operations are on the same level of precedence as multiplication?
_____ .
b) When parentheses are nested, which set of parentheses is evaluated first in an arithmetic expression? _____.
c) A location in the computer's memory that may contain different values at various times throughout the execution of a program is called a _____.

2.12 What, if anything, prints when each of the following C++ statements is performed? If nothing prints, then answer "nothing." Assume x = 2 and y = 3.
a) cout << x;
b) cout << x + x;
c) cout << "x=";
d) cout << "x = " << x;
e) cout << x + y << " = " << y + x;
f) z = x + y;
g) cin >> x >> y;

2.19 ***(Arithmetic, Smallest and Largest)*** Write a program that inputs three integers from the keyboard and prints the sum, average, product, smallest and largest of these numbers. The screen dialog should appear as follows:

Input three different integers: 13 27 14
Sum is 54
Average is 18
Product is 4914
Smallest is 13
Largest is 27

2.21 ***(Displaying Shapes with Asterisks)*** Write a program that prints a diamond as follows:

2.24 ***(Odd or Even)*** Write a program that reads an integer and determines and prints whether it's odd or even. [*Hint:* Use the modulus operator. An even number is a multiple of two. Any multiple of two leaves a remainder of zero when divided by 2.]

2.25 ***(Multiples)*** Write a program that reads in two integers and determines and prints if the first is a multiple of the second. [*Hint:* Use the modulus operator.]

2.28 ***(Digits of an Integer)*** Write a program that inputs a five-digit integer, separates the integer into its digits and prints them separated by three spaces each. [*Hint:* Use the integer division and modulus operators.] For example, if the user types in 42339, the program should print:

4 2 3 3 9