3.18 Write a single C++ statement that prints "too many" if the variable `count` exceeds 100, using
a. an `if` statement;
b. the conditional expression operator.

Problems

3.1 Modify the program in Example 3.1 on page 36 so that it prints a response only if `n` is divisible by `d`.
3.2 Modify the program in Example 3.5 on page 39 so that it prints the minimum of four input integers.
3.3 Modify the program in Example 3.5 on page 39 so that it prints the median of three input integers.
3.4 Modify the program in Example 3.6 on page 39 so that it has the same effect without using a statement block.
3.5 Predict the output from the program in Example 3.7 on page 40 after removing the declaration on the fifth line of the program. Then run that modified program to check your prediction.
3.6 Write and run a program that reads the user's age and then prints "You are a child." if the age < 18, "You are an adult." if 18 ≤ age < 65, and "You are a senior citizen." if age ≥ 65.
3.7 Write and run a program that reads two integers and then uses the conditional expression operator to print either "multiple" or "not" according to whether one of the integers is a multiple of the other.
3.8 Write and run a program that simulates a simple calculator. It reads two integers and a character. If the character is a `+`, the sum is printed; if it is a `-`, the difference is printed; if it is a `*`, the product is printed; if it is a `/`, the quotient is printed; and if it is a `%`, the remainder is printed. Use a `switch` statement.
3.9 Write and run a program that plays the game of "Rock, paper, scissors." In this game, two players simultaneously say (or display a hand symbol representing) either "rock," "paper," or "scissors." The winner is the one whose choice dominates the other. The rules are: paper dominates (wraps) rock, rock dominates (breaks) scissors, and scissors dominate (cut) paper. Use enumerated types for the choices and for the results.
3.10 Modify the solution to Problem 3.9 by using a `switch` statement.
3.11 Modify the solution to Problem 3.10 by using conditional expressions where appropriate.
3.12 Write and test a program that solves quadratic equations. A *quadratic equation* is an equation of the form $ax^2 + bx + c = 0$, where a, b, and c are given coefficients and x is the unknown. The coefficients are real number inputs, so they should be declared of type `float` or `double`. Since quadratic equations typically have two solutions, use `x1` and `x2` for the solutions to be output. These should be declared of type `double` to avoid inaccuracies from round-off error. (See Example 2.15 on page 28.)
3.13 Write and run a program that reads a six-digit integer and prints the sum of its six digits. Use the *quotient operator* `/` and the *remainder operator* `%` to extract the digits from the integer. For example, if `n` is the integer 876,543, then `n/1000%10` is its thousands digit 6.

Answers to Review Questions

3.1
```
if (count > 100) cout << "Too many";
```