3 == 9? 25 : 18 // 3 == 9 is false, so expression value is 18

We can paraphrase the first example this way: If 5 is greater than 3, the expression evaluates to 10; otherwise, it evaluates to 12. In real programming situations, of course, the expressions would involve variables.

Listing 6.9 uses the conditional operator to determine the larger of two values.

Listing 6.9 condit.cpp

// condit.cpp -- using the conditional operator
#include <iostream>
using namespace std;
int main()
{
    int a, b;
    cout << "Enter two integers: ";
    cin >> a >> b;
    cout << "The larger of " << a << " and " << b;
    int c = a > b ? a : b; // c = a if a > b, else c = b
    cout << " is " << c << "\n";
    return 0;
}

Here is a sample run:

Enter two numbers: 25 27
The larger of 25 and 27 is 27

The key part of the program is this statement:

int c = a > b ? a : b;

It produces the same result as the following statements:

int c;
if (a > b)