#include <iostream.h>
#include <iomanip.h>

/****************************************************************************
// Integer Calculator Program (Version 3)
//
// This program implements a simple integer calculator using a "switch" statement.
//
// Programmer:  John G. Del Greco
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/****************************************************************************

void main () {

    int choice, //stores a user choice
         n,  //first integer
         m,  //second integer
         result;  //result of the operation

    cout << "Welcome to the integer calculator.\n";
    do {
        //Display the menu for the user
        cout << "\n1:  add\n";
        cout << "2:  subtract\n";
        cout << "3:  minimum\n";
        cout << "4:  maximum\n";
        cout << "5:  multiply\n";
        cout << "6:  quotient\n";
        cout << "7:  remainder\n";
        cout << "8:  exit calculator\n\n";

        // Ask for a valid choice
        do {
            cout << "Please make a choice: ";
            cin >> choice;
            if (((choice < 1) || (choice > 8))
                cout << "Choice out of range. Try again.\n";
            )
        while ((choice < 1) || (choice > 8));

        //Perform a computation
        if (choice != 8) {
            //Input the two integers
            cout << "Input the first integer: ";
            cin >> n;
            cout << "Input the second integer: ";
            cin >> m;
        }
    }
}
switch (choice) {
    case 1: {
        result = n + m;
        cout << "The sum is: " << result << endl;
        break;
    }
    case 2: {
        result = n - m;
        cout << "The difference is: " << result << endl;
        break;
    }
    case 3: {
        result = n;
        if (m < n)
            result = m;
        cout << "The minimum is: " << result << endl;
        break;
    }
    case 4: {
        result = n;
        if (m > n)
            result = m;
        cout << "The maximum is: " << result << endl;
        break;
    }
    case 5: {
        result = n * m;
        cout << "The product is: " << result << endl;
        break;
    }
    case 6: {
        result = n / m;
        cout << "The quotient is: " << result << endl;
        break;
    }
    case 7: {
        result = n % m;
        cout << "The remainder is: " << result << endl;
    }
}
}
while (choice != 8);

//Say goodbye

cout << "\nGoodbye." << endl;