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| 1. The following program fragments illustrate the relational and equality operators. Show the output produced by each, assuming that i, j, and k are int variables. 2. 1 3. 1 4. 1 5. 0 |
| 1. The following program fragments illustrate the short-circuit behavior of logical expressions. Show the output produced by each, assuming that i, j, and k are int variables. 2. 1 3. 1 4. 1 5. 1 |
| 1. The following program fragments illustrate the short-circuit behavior of logical expressions. Show the output produced by each, assuming that i, j, and k are int variables. 2. 1 3 4 5 3. 0 7 8 9 4. 0 7 8 9 5. 1 2 1 1 |
| 1. Write a single expression whose value is either -1, 0, or +1, depending on whether i is less than, equal to, or greater than j, respectively.   (i < j) ? (-1) : (i > j) |
| 1. Is the following if statement legal?   legal. when n is equal to 0, the result of expression n >= 1 <= 10 is 1, therefore printf is called. |
| 1. Is the following if statement legal?   legal. when n is equal to 5, the result of expression n == 1 – 10 is 0, therefore skip the inner statement. |
| 1. What does the following statement print if i has the value 17? What does it print if i has the value -17?   When i has the value 17: 17  When i has the value -17: 17 |
| 1. The following if statement is unnecessarily complicated. Simplify it as much as possible   teenager = (age >= 13) && (age <= 19); |
| 1. Are the following if statements equivalent? If not, why not?   Output is equivalent, but number of comparisons is different. |
| 1. What output does the following program fragment produce? (Assume that i is an integer variable.)   onetwo |
| 1. Write a switch statement whose controlling expression is the variable area\_code. If the value of area\_code is in the table, the switch statement will print the corresponding city name. Otherwise, the switch statement will display the message “Area code not recognized”. Use the techniques discussed in Section 5.3 to make the switch statement as simple as possible.   9 switch (area\_code) {  10 case 229: case 404: case 470:  11 printf("Albany");  12 break;  13  14 case 479:  15 printf("Macon");  16 break;  17  18 case 678: case 770:  19 printf("Atlanta");  20 break;  21  22 case 706: case 762:  23 printf("Columbus");  24 break;  25  26 case 912:  27 printf("Savannah");  28 break;  29  30 default:  31 printf("Area code not recognized");  32 } printf("\n"); |