Tips

**Syntax/correctness issues**

The statement of a control structure can be a single statement, a compound statement marked out with braces {}, or an empty statement that consists of just a semicolon (;).

The condition for a control structure must be placed within parentheses ().

**Formatting suggestions**

Use consistent indentation when formatting control structures. Indentation implies hierarchy and subordination, i.e. which statements belong to which control structure.

When writing expressions with logical and relational operators, add white space around each operator to make the expression easier to read. For example:

((*number*<=10)&&(*total*<=1000)) becomes ((*number* <= 10) && (*total* <= 1000))

**Software engineering**

Use pseudocode to develop your solution to a problem. Then convert your pseudocode to Java code.

The && operator performs short-circuit evaluation in Java. If the first operand of an && expression is false, the second condition is not evaluated. Consequently you should write the expression most likely to be false as the first half of an && expression.

(expression1 && expression2)

If expression1 is false, the && operator will ignore processing expression2.

The || operator is also an efficient operator and performs short-circuit evaluation. If the first operand of an || expression is true, the second condition is not evaluated. You should put the expression most likely to be true as the first condition of an || expression.

(expression1 || expression2)

If expression1 is true, the || operator will ignore processing expression2.