

## Key Terms and Concepts – Lesson 5

CIS163AA – Java Programming – Level 1

Term	Definition
A dual-alternative if	A dual-alternative if is a decision structure that takes one of two possible courses of action.
Boolean	True or false values are <b>Boolean</b> values; every computer decision results in a Boolean value.
Conditional operator	The <b>conditional operator</b> requires three expressions separated with a question mark and a colon, and is used as an abbreviated version of the ifelse structure.
Conditional OR operator	You can use the <b>conditional OR operator</b> between Boolean expressions to determine whether either expression is true. The OR operator is written as two pipes (    ).
Decision structure	A <b>decision structure</b> is a logical structure that involves choosing between alternative courses of action based on some value within a program.
Empty statement	An <b>empty statement</b> contains only a semicolon.
Equivalency operator	The <b>equivalency operator</b> ( == ) compares values and returns true if they are equal.
Flowchart	A <b>flowchart</b> is a tool that helps programmers plan a program's logic by writing the steps in diagram form, as a series of shapes connected by arrows.
If statement	In Java, the simplest statement you can use to make a decision is the <b>if statement</b> ; you use it to write a single-alternative decision.
Ifelse statement	In Java, the <b>ifelse statement</b> provides the mechanism to perform one action when a Boolean expression evaluates as true and to perform a different action when a Boolean expression evaluates as False.
Logical AND operator	You can use the <b>logical AND operator</b> between Boolean expressions to determine whether both are true. The AND operator is written as two ampersands ( && ).
Nested if	A <b>nested if</b> statement contains an if structure within another if structure.
Not	You use the <b>NOT</b> operator, which is written as the exclamation point (!), to negate the result of any Boolean expression.
Pseudocode	<b>Pseudocode</b> is a tool that helps programmers plan a program's logic by writing plain English statements.

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Range check	A <b>range check</b> is a series of statements that determine within which of a set of ranges a value falls.
Sequence structure	A <b>sequence structure</b> is a logical structure in which one step follows another unconditionally.
Short-circuit evaluation	<b>Short-circuit evaluation</b> describes the feature of the AND and OR operators in which evaluation is performed only as far as necessary to make a final decision.
Single-alternative if	A <b>single-alternative if</b> is a decision structure that performs an action, or not, based on one alternative.
Switch statement	The <b>switch statement</b> uses up to four keywords to test a single variable against a series of exact integer or character values. The keywords are switch, case, break, and default.
Ternary operator	A <b>ternary operator</b> is one that needs three operands.

Note: Please see key terms in the textbooks for examples of some of the terms.