

Key Terms and Concepts – Lesson 6

CIS163AA – Java Programming – Level 1

Term	Definition
Accumulating	Accumulating is the process of repeatedly increasing a value by some amount to produce a total.
Add and assign operator	The add and assign operator (+=) alters the value of the operand on the left by adding the operand on the right to it.
Counting	Counting is the process of continually incrementing a variable to keep track of the number of occurrences of some event.
Definite loop	A loop that executes a specific number of times is a definite loop or a counted loop.
Divide and assign operator	The divide and assign operator (/=) alters the value of the operand on the left by dividing the operand on the right into it.
Dowhile loop	The dowhile loop executes a loop body at least one time; it checks the loop control variable at the bottom of the loop after one repetition has occurred.
Do-nothing	A do-nothing loop is one that performs no actions other than looping.
Empty body	An empty body is a block with no statements in it.
For loop	A for loop is a special loop that can be used when a definite number of loop iterations is required.
Indefinite loop	An indefinite loop is one in which the final number of loops is unknown.
Infinite loop	An infinite loop is a loop that never ends.
Inner loop	An inner loop is contained entirely within another loop.
Iteration	An iteration is one loop execution.
Loop	A loop is a structure that allows repeated execution of a block of statements.
Loop body	A loop body is the block of statements that executes when the Boolean expression that controls the loop is true.
Loop control variable	A loop control variable is a variable whose value determines whether loop execution continues.
Loop fusion	Loop fusion is the technique of combining two loops into one.
Multiply and assign operator	The multiply and assign operator (*=) alters the value of the operand on the left by multiplying the operand on the right by it.

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Outer loop	An outer loop contains another loop.
Postfix ++ postfix increment operator	The postfix ++ , also known as the postfix increment operator , evaluates a variable, then adds 1 to it.
Posttest loop	A posttest loop is one in which the loop control variable is tested after the loop body executes.
Prefix and postfix decrement operator	The prefix and postfix decrement operator s subtract 1 from a variable. For example, if $b = 4$; and $c = b$; , 4 is assigned to c, and then after the assignment, b is decreased and takes the value 3. If $b = 4$; and $c =b$; , b is decreased to 3, and 3 is assigned to c.
Prefix ++prefix increment operator	The prefix ++ , also known as the prefix increment operator , adds 1 to a variable, then evaluates it.
Pretest loop	A pretest loop is one in which the loop control variable is tested before the loop body executes.
Priming read priming input	A priming read or priming input is the first input statement prior to a loop that will execute subsequent input statements for the same variable.
Remainder and assign operator	The remainder and assign operator (%=) alters the value of the operand on the left by assigning the remainder when the left operand is divided by the right operand.
Subtract and assign operator	The subtract and assign operator (-=) alters the value of the operand on the left by subtracting the operand on the right from it.
Validating data	Validating data is the process of ensuring that a value falls within a specified range.
While loop	A while loop executes a body of statements continually as long as the Boolean expression that controls entry into the loop continues to be true.

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