



How To Java Tutorials

Lesson 6

Java Operators

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Assignment

One of the most common operators that you'll encounter is The simple assignment operator "=". You saw this operator In the previous apps; it assigns the value on its right to the Operand on its left: .

EX (int X = 0; String Sh= "new";)

The Arithmetic Operators

The Java programming language provides operators that Perform addition, subtraction, multiplication, and division. There's a good chance you'll recognize them by their Counterparts in basic mathematics. The only symbol that Might look new to you is "%", which divides one operand By another and returns the remainder as its result.

+	Additive operator (String Concatenation)
-	Subtraction operator
*	Multiplication operator
/	Division operator
%	Remainder operator

CODEING

The Unary Operators

The unary operators require only one operand; they perform various operations such as incrementing/decrementing a value by one, negating an expression, or inverting the value of a Boolean.

Operator	Description
+	Unary plus operator, indicates positive value
-	Unary minus operator; negates an expression
++	Increment operator; increments a value by 1
--	Decrement operator; decrements a value by 1
!	Logical complement operator; inverts the value of a boolean

CODEING

Creating Unary Code

The Equality and Relational Operators

The equality and relational operators determine if one Operand is greater than, less than, equal to, or not equal to Another operand. The majority of these operators will Probably look familiar to you as well.

==	Equal to
!=	Not Equal
>	Greater Than
>=	Greater Than or Equal
<	Less Than
<=	Less Than or Equal

CODEING

Creating Code Examples

The Conditional Operators

The `&&` and `||` operators perform Conditional-AND and Conditional-OR operations on two boolean expressions. These Operators exhibit "short-circuiting" behavior, which means That the second operand is evaluated only if needed.

<code>&&</code>	Conditional-AND
<code> </code>	Conditional-OR

CODEING

Creating Code Examples

There is another conditional operator that is `?:`
But we will explain it with the control flow statements

instanceof Operators

The instanceof operator compares an object to a specified Type. You can use it to test if an object is an instance of a Class, an instance of a subclass, or an instance of a class That implements a particular interface.

CODEING

Creating InstanceofDemo

The following program, InstanceofDemo, defines a parent class (named Parent), a simple interface (named MyInterface), and a child class (named Child) that inherits from the parent and implements the interface.

Bitwise and Bit Shift Operators

The Java programming language also provides operators that Perform bitwise and bit shift operations on integral types. The operators discussed in this section are less commonly Used. Therefore, their coverage is brief; the intent is to Simply make you aware that these operators exist.

<code>~</code>	Inverts a bit pattern
<code><<</code>	Shifts a bit pattern to the left
<code>>></code>	Shifts a bit pattern to the Right
<code>&</code>	Performs a bitwise AND operation
<code> </code>	Performs a bitwise inclusive OR operation.
<code>^</code>	Performs a bitwise exclusive OR operation.

CODEING

Creating Binary demo

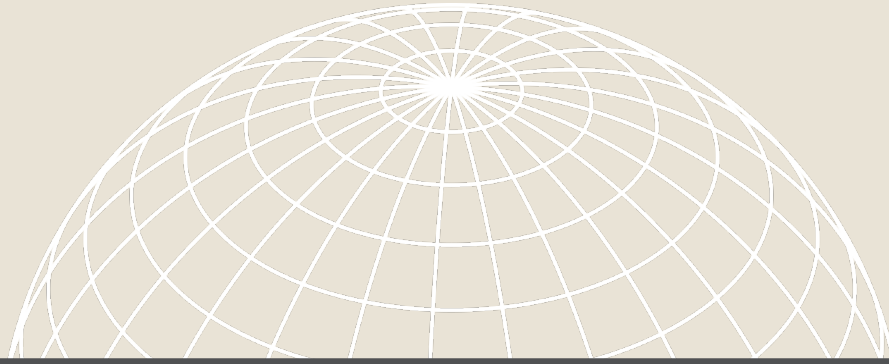
Test Your Self

Assignment

Make a simple Java application
That use the Brackets () to make this
Arithmetic expression Done under the
Arithmetic operations Priority in Java

$$2+3*4/-3-5\%3=??$$

In Step by Step Let us know How
Java compiler perform this expression



Thank You For Watching

I am still not Better, But I always try .

See You Next

