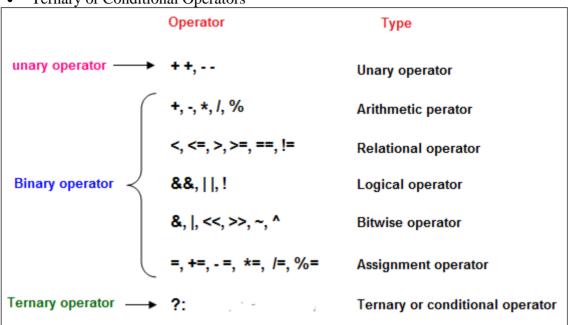
## **Operators in Java**

Operator is a special symbol that tells the compiler to perform specific mathematical or logical Operation. Java supports following lists of operators.

- Arithmetic Operators
- Relational Operators
- Logical Operators
- Bitwise Operators
- Assignment Operators
- Ternary or Conditional Operators



### **Arithmetic Operators**

Given table shows the entire Arithmetic operator supported by Java Language. Let's suppose variable A hold 8 and B hold 3.

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Operator	Example (int A=8, B=3)	Result	
+	A+B	11	
-	A-B	5	
*	A*B	24	
/	A/B	2	
%	A%4	0	

## **Relational Operators**

Which can be used to check the Condition, it always returns true or false. Let's suppose variable A hold 8 and B hold 3.

Operators	Example (int A=8, B=3)	Result
<	A <b< td=""><td>False</td></b<>	False
<=	A<=10	True
>	A>B	True
>=	$A \le B$	False
==	A== B	False
!=	A!=(-4)	True

#### **Logical Operators**

Which can be used to combine more than one Condition? Suppose you want to combined two conditions A<B and B>C, then you need to use Logical Operator like (A<B) && (B>C). Here && is Logical Operator.

Operator	Example (int A=8, B=3, C=-10)	Result
&&	(A <b) &&="" (b="">C)</b)>	False
!	!(B<=-A)	True
	(B!=-C)    (A==B)	True

# Truth table of Logical Operator

<b>C</b> 1	C2	C1 && C2	C1    C2	!C1	!C2
T	T	Τ	T	F	F
T	F	F	T	F	T
F	T	F	T	T	F
F	F	F	F	T	T

## Assignment operators

Which can be used to assign a value to a variable? Let's suppose variable A hold 8 and B hold 3.

Operator	Example (int A=8, B=3)	Result
+=	A+=B  or  A=A+B	11
-=	A-=3 or A=A+3	5
*=	A*=7 or A=A*7	56
/=	A/=B or A=A/B	2
%=	A%=5 or A=A%5	3
=a=b	Value of b will be assigned to a	

## Ternary operator

If any operator is used on three operands or variable is known as ternary operator. It can be represented wit