

Table of expression forms

Expression	Meaning	Associativity	Argument(s)	Result
<code>a[...]</code>	array access (Section 8.1)		<code>t[]</code> , integer	<code>t</code>
<code>o.f</code>	field access (Section 11.8)		object	
<code>o.m(...)</code>	method call (Section 11.10)		object	
<code>x++</code>	postincrement		numeric	numeric
<code>x--</code>	postdecrement		numeric	numeric
<code>++x</code>	preincrement		numeric	numeric
<code>--x</code>	predecrement		numeric	numeric
<code>-x</code>	negation (minus sign)	right	numeric	numeric
<code>~e</code>	bitwise complement	right	integer	<code>int/long</code>
<code>!e</code>	logical negation	right	boolean	boolean
<code>new t[...]</code>	array creation (Section 8.1)		type	<code>t[]</code>
<code>new C(...)</code>	object creation (Section 11.6)		class	<code>C</code>
<code>(t)e</code>	type cast (Section 11.11)		type, any	<code>t</code>
<code>e1 * e2</code>	multiplication	left	numeric	numeric
<code>e1 / e2</code>	division	left	numeric	numeric
<code>e1 % e2</code>	remainder	left	numeric	numeric
<code>e1 + e2</code>	addition	left	numeric	numeric
<code>e1 + e2</code>	string concatenation	left	<code>String</code> , any	<code>String</code>
<code>e1 + e2</code>	string concatenation	left	any, <code>String</code>	<code>String</code>
<code>e1 - e2</code>	subtraction	left	numeric	numeric
<code>e1 << e2</code>	left shift (Section 11.3)	left	integer	<code>int/long</code>
<code>e1 >> e2</code>	signed right shift	left	integer	<code>int/long</code>
<code>e1 >>> e2</code>	unsigned right shift	left	integer	<code>int/long</code>
<code>e1 < e2</code>	less than	none	numeric	boolean
<code>e1 <= e2</code>	less than or equal to	none	numeric	boolean
<code>e1 >= e2</code>	greater than or equal to	none	numeric	boolean
<code>e1 > e2</code>	greater than	none	numeric	boolean
<code>e instanceof t</code>	instance test (Section 11.7)	none	any, ref. type	boolean
<code>e1 == e2</code>	equal	left	compatible	boolean
<code>e1 != e2</code>	not equal	left	compatible	boolean
<code>e1 & e2</code>	bitwise and	left	integer	<code>int/long</code>
<code>e1 & e2</code>	logical strict and	left	boolean	boolean
<code>e1 ^ e2</code>	bitwise exclusive-or	left	integer	<code>int/long</code>
<code>e1 ^ e2</code>	logical strict exclusive-or	left	boolean	boolean
<code>e1 e2</code>	bitwise or	left	integer	<code>int/long</code>
<code>e1 e2</code>	logical strict or	left	boolean	boolean
<code>e1 && e2</code>	logical and (Section 11.2)	left	boolean	boolean
<code>e1 e2 </code>	logical or (Section 11.2)	left	boolean	boolean
<code>e1 ? e2 : e3</code>	conditional (Section 11.5)	right	boolean, any, any	any
<code>x = e</code>	assignment (Section 11.4)	right	<code>e</code> subtype of <code>x</code>	type of <code>x</code>
<code>x += e</code>	compound assignment	right	compatible	type of <code>x</code>