Casual Language Documentation
Compiling Techniques 2019–2020

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1 Getting Started

2 Implementation Decisions

2.1 Operator Precedence

Precedence order. When computing the expression $3 + 3 * 5$, the operator with higher precedence goes first, in this case its the multiplication, the expression is evaluated as if it was $3 + (3 * 5)$.

Associativity. When an expression has two operators with the same precedence, it is evaluated according to its associativity. For instance, the expression $72/2/3$ is computed as if it was $(72/2)/3$, because the division operator has left to right associativity. Other operators are not associative, therefore, they can't share the same operand with other operators in the same level of precedence. The expression $3 < 4 >= 4$ is invalid.

The following table summarizes all the information regarding precedence and associativity in Casual, a higher level means higher precedence.

Level	Operator	Description	Associativity
9	[ ] ( )	access array element parentheses	left to right
8	$-$!	unary minus unary logical NOT	right to left
7	$*$ / $\%$	multiplicative	left to right
6	$+$ $-$	additive	left to right
5	$<$ $<=$ $>$ $>=$	relational	not associative
4	$==$ $!=$	equality	left to right
3	$\&\&$	logical AND	left to right
2	$\|\|$	logical OR	left to right
1	$=$	assignment	right to left