

Language	MATLAB/Octave	Python	R
Short-circuit logical AND	<code>a && b</code>	<code>a and b</code>	<code>a && b</code>
Short-circuit logical OR	<code>a b</code>	<code>a or b</code>	<code>a b</code>
Element-wise logical AND	<code>a & b</code> or <code>and(a,b)</code>	<code>logical_and(a,b)</code> or <code>a and b</code>	<code>a & b</code>
Element-wise logical OR	<code>a b</code> or <code>or(a,b)</code>	<code>logical_or(a,b)</code> or <code>a or b</code>	<code>a b</code>
Logical EXCLUSIVE OR	<code>xor(a, b)</code>	<code>logical_xor(a,b)</code>	<code>xor(a, b)</code>
Logical NOT	<code>~a</code> or <code>not(a)</code> Octave: <code>~a</code> or <code>!a</code>	<code>logical_not(a)</code> or <code>not a</code>	<code>!a</code>
True if any element is nonzero	<code>any(a)</code>		
True if all elements are nonzero	<code>all(a)</code>		