

Notes:

- **C++ Standard: 4.7 Integral conversions:**

...

If the destination type is `bool`, see 4.12. If the source type is `bool`, the value `false` is converted to zero and the value `true` is converted to one.

...

- **C++ Standard: 4.12 Boolean conversions:**

A prvalue of arithmetic, unscoped enumeration, pointer, or pointer to member type can be converted to a prvalue of type `bool`. A zero value, null pointer value, or null member pointer value is converted to `false`; any other value is converted to `true`. For direct-initialization (8.5), a prvalue of type `std::nullptr_t` can be converted to a prvalue of type `bool`; the resulting value is `false`.

<code>true</code>	<code>false</code>	<code>bool(-2)</code>	<code>bool(-1)</code>	<code>bool(0)</code>	<code>bool(1)</code>	<code>bool(2)</code>	<code>bool(3)</code>
1	0	1	1	0	1	1	1

<code>bool('\0')</code>	<code>bool('y')</code>	<code>bool('n')</code>	<code>bool("yes")</code>	<code>bool("no")</code>	<code>bool("hello")</code>
0	1	1	1	1	1

<code>bool(-5.7)</code>	<code>bool(0.0)</code>	<code>bool(5.7)</code>	<code>bool(42.8)</code>
1	0	1	1

a	b	a == b	a != b	a && b	a b
0	0	1	0	0	0
0	1	0	1	0	1
1	0	0	1	0	1
1	1	1	0	1	1

a	b	a == b && 'y'	a == b 'y'	a != b && 'y'	a != b 'y'
0	0	1	1	0	1
0	1	0	1	1	1
1	0	0	1	1	1
1	1	1	1	0	1

a	b	c	a==b && a==c	a==b a==c	a!=b && a!=c	a!=b a!=c
0	0	0	1	1	0	0
0	0	1	0	1	0	1
0	1	0	0	1	0	1
0	1	1	0	0	1	1
1	0	0	0	0	1	1
1	0	1	0	1	0	1
1	1	0	0	1	0	1
1	1	1	1	1	0	0