!

[Boolean Operators]

Description

**Logical NOT** results in a true if the operand is false and vice versa.

Example Code

This operator can be used inside the condition of an [if](https://www.arduino.cc/reference/en/language/structure/control-structure/if) statement.

if (!x) { // if x is not true

// statements

}

It can be used to invert the boolean value.

x = !y; // the inverted value of y is stored in x

Notes and Warnings

The bitwise not ~ (tilde) looks much different than the boolean not ! (exclamation point or "bang" as the programmers say) but you still have to be sure which one you want where.