

FLOW BLOCKS: **BOOLEANS &** **LOGICAL** **STATEMENTS**

BOOLEANS

A boolean is a type of data that can only hold one of two values: TRUE or FALSE.

Booleans are often found when assessing the validity of a statement. For example, let's look at the statement $A < B$

- If $A = 1$ and $B = 2$, then this statement is correct. 1 is less than 2. We can say that this statement is TRUE.
- If $A = 2$ and $B = 1$, then this statement is not correct. 2 is not less than 1. We can say that this statement is FALSE.

You can use a boolean constant block in your code if you want to use the boolean value TRUE. Combine the TRUE block with a NOT block to get a value of FALSE.



True

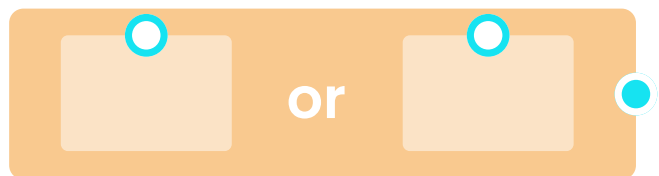
LOGICAL BLOCKS

Logical blocks let you take one or more boolean inputs, perform an operation on, and then return a new boolean. The most common logical operations are AND, OR, and NOT.



The AND block outputs TRUE if both inputs are TRUE. Otherwise, it outputs FALSE.

The OR block outputs TRUE if one or both inputs are TRUE. Otherwise, it outputs FALSE.



The NOT block outputs TRUE if the input is FALSE, and outputs FALSE if the input is TRUE.

Logical blocks take *booleans* (TRUE or FALSE) as input and also output *booleans*.