

INTRODUCTION TO *FLOW* BLOCKS 1



ACTION BLOCKS

These blocks enable the robot to perform an action, like jump. Some action blocks require an input, like setting a motor to a specific speed.

SENSING BLOCKS

These blocks enable the robot to get information about its surroundings. All sensing blocks output the latest *number* read by the sensor.

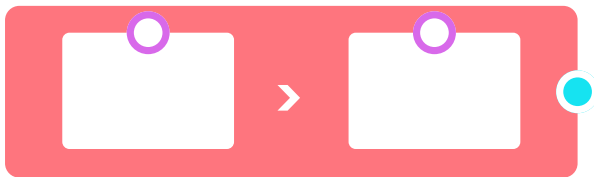


OPERATION BLOCKS

These blocks are used to perform a mathematical operation on the two numbers connected on either side of the central symbol. You can either connect a number track to the input handle or type a fixed number into the box. All operation blocks output the resulting *number*.



COMPARISON BLOCKS



There are also greater than, less than, equal, and not-equal blocks to compare two input numbers. These comparison blocks output either TRUE or FALSE depending on if the statement comprised of the two input numbers and the central symbol is correct or not.

SENSING + COMPARISON COMBO



Sensing blocks output numbers so they can be connected to operation and comparison blocks. In this example, the operation block outputs TRUE if the sensor reading is less than 100, and FALSE otherwise.



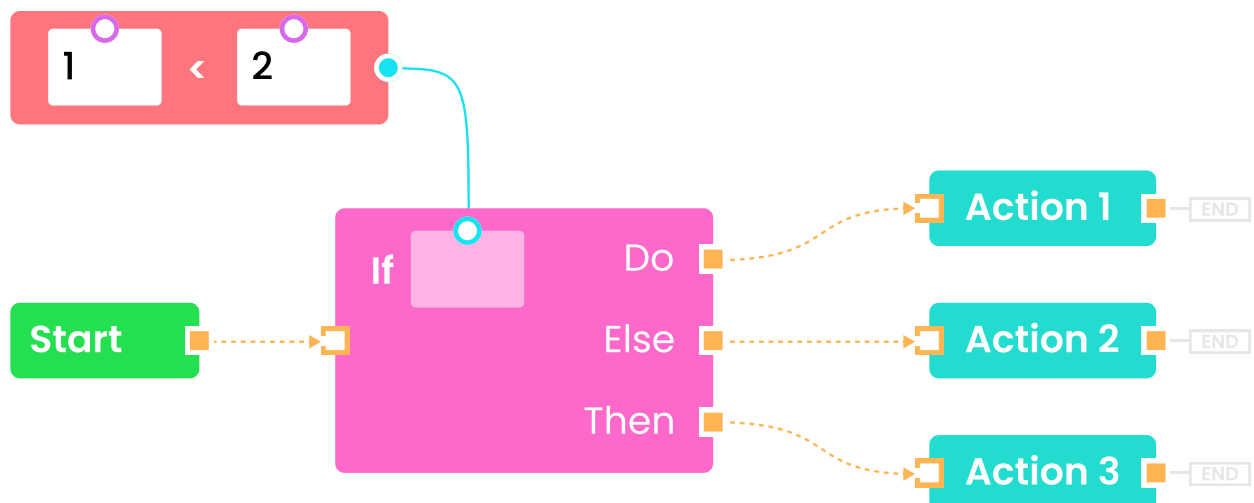
CONDITIONAL BLOCKS

IF BLOCK

The IF block operates according to the value connected to its input. IF blocks only accept *boolean* inputs (aka the input needs to always be either TRUE or FALSE). We call this input the condition.

If the condition is TRUE, it will run the DO branch (Action 1) once. If the condition is FALSE, it will run the ELSE branch (Action 2) once. After running one of the two branches, the code will continue by running the THEN branch (Action 3).

You do not need to connect blocks to every branch.



In this example, which actions will be run?