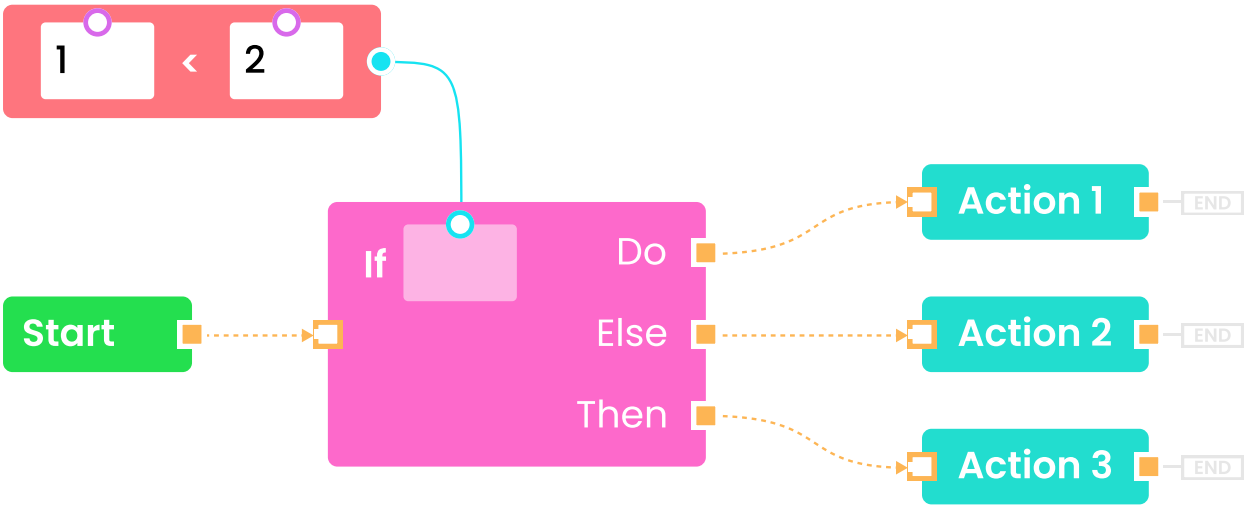
FLOW BLOCKS: IF STATEMENTS

IF BLOCK

The IF block operates according to the input condition, which is always either TRUE or FALSE.

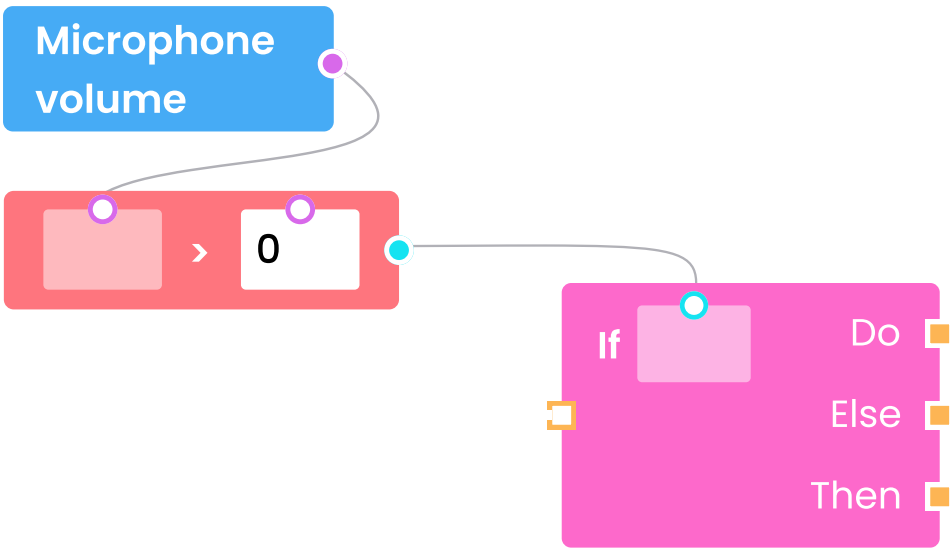
If the condition is TRUE, it will run the DO branch (Action 1) once.
If the condition is FALSE, it will run the ELSE branch (Action 2) once.
After running one of the two branches, the code will continue by running the THEN branch (Action 3).

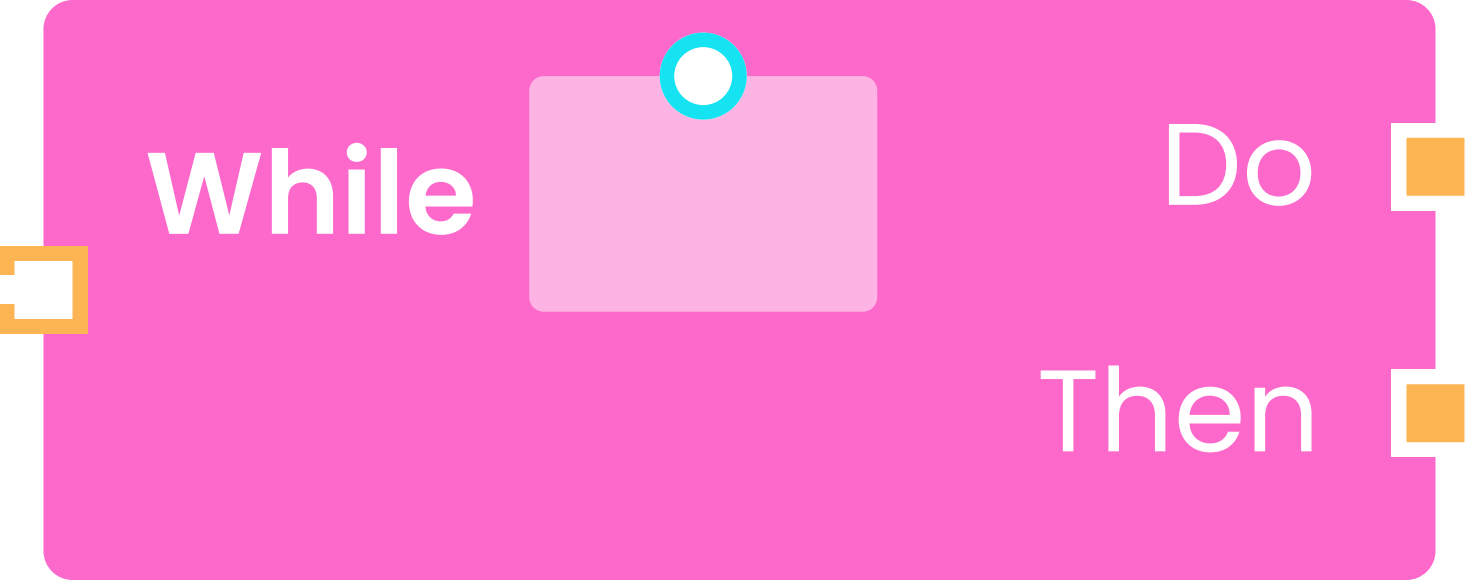


IF blocks are helpful because they enable our code to make its own “decisions”.

In the example on the previous page, our code compares the numbers 1 and 2. If 1 is less than 2, our code will run Action 1, then Action 3. If 1 is not less than 2, for some reason, then our code will run Action 2, then Action 3. In this case, 1 is always less than 2. But, if we connected the output of a sensor with changing values to this comparison, then we can see the power of an IF statement.

Let’s say that you wanted to write a piece of code for your mobile phone that would continuously check if you were talking and switch the screen on while you were and switch it off again when you stopped. You could write that code using an IF block like so:




While
Do
Then


Screen
ON
END


Screen
OFF
END