

Scratch Variables, Logic & Broadcasting

https://en.scratch-wiki.info/wiki/Scratch_Wiki_Home

<http://sjbdigital.com/classesPDF/Scratch%20Intro.pdf>

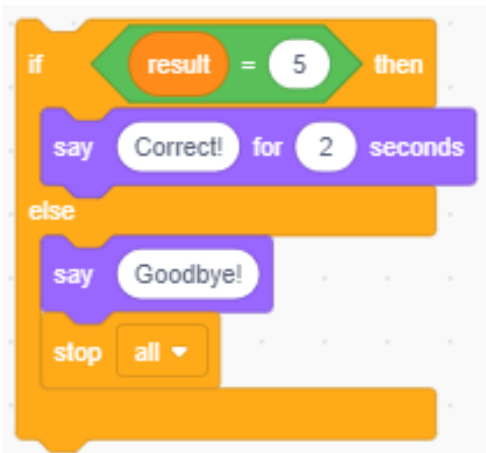


Scratch Broadcast Messages:

<https://www.youtube.com/watch?v=6qB2B6lzHy8>



In programming, a very important part is "checking conditions." this is done with the If () block.



<http://sjbdigital.com/classesPDF/Scratch%20Intro.pdf>

[https://en.scratch-wiki.info/wiki/Broadcast_\(\)_\(block\)](https://en.scratch-wiki.info/wiki/Broadcast_()_(block))

Scratch Broadcast:

The **When I Receive ()** [block](#) is an [Events block](#) and a [Hat block](#). [Scripts](#) that begin with this block will be invoked once the specified [broadcast](#) has been sent by a calling script.

The **Broadcast Block** sends a [broadcast](#) throughout the whole [Scratch](#) program. Any [scripts](#) in any [sprites](#) that are hatted with the [When I Receive \(\)](#) block that is set to a specified broadcast will activate.

Scratch if...then...else

[https://en.scratch-wiki.info/wiki/If_\(\)_Then,_Else_\(block\)](https://en.scratch-wiki.info/wiki/If_()_Then,_Else_(block))

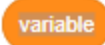

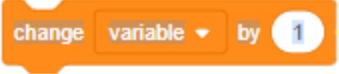
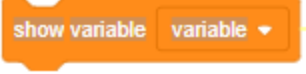

<https://www.youtube.com/watch?v=FjPDd0yE90M>

The **If ...Then** block is a Control block. The block checks its Boolean (true/false) **condition**. If the **condition** is true, the blocks held inside it will run, else something else happens.

Variables:

There are five different blocks relating to variables:

Note: Click on a block to find out more.

-  This is the block that reports the value of a variable
-  This sets a chosen variable to a specified value
-  This changes the value of a chosen variable by a specified amount
-  This shows the specified variable in the project player
-  This reverses the 'show variable' block

Variables are used whenever a value must be stored — i.e., if a [project](#) required the user to input a name and then remember that name, the name would be stored in a variable. With this, the name can be retrieved at any time; all the project has to do is check the value (which is the name).

Naming of Variables:

- choose a name that describes what the variable represents.
- All variable names must begin with a letter of the alphabet.
- Variable names may then contain letters and the digits 0 to 9.
- No spaces or special characters