**How to Use the Selector Tutorial**

Functions -> Programming -> Comparison ![icon] -> Selector ![icon]

The Selector is a special type of comparator which acts as a traffic light that mediates data from two input sources depending on a Boolean value (equivalent to a single bit multiplexor).

To find the Selector function, open the Functions palette and select the Programming palette. In the Programming palette, open the Comparison palette ![icon] where you will find the Selector function ![icon]. Place the Selector where you want it in your block diagram.

You will notice that the Selector takes in three inputs, two of which can be any of the same data type, and one which is a Boolean data type. The Boolean data type is used to select between the two inputs. If the Boolean input is True, then the Selector will pass the top input value to its output. If the Boolean value is False the Selector will pass the bottom input value to its output.

The Selector function is used as a mechanism to control data flow. For example, say we have two inputs A and B which we want to select based on some Boolean condition. In this example, if a randomly generated number is greater than .5, a True Boolean value will be passed to the Selector and the Selector will pass A to the output. If the randomly selected number is less than .5, then a False Boolean value is sent to the Selector and the Selector will pass B to the output.
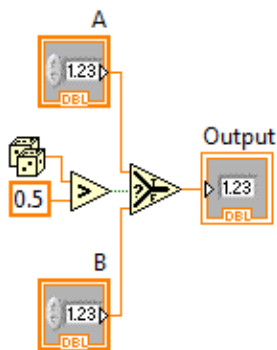


Figure 1