**How to Replace an Array Subset Tutorial**

Functions -> Programming -> Array -> Replace Array Subset

Start by opening the Functions palette and select the Programming palette. Under the Programming palette select the Array palette where you will find the Replace Array Subset function.

The Replace Array Subset is a function that takes in an existing array and replaces an entry with a new element or sub-array. In addition, the Replace Array Subset function also takes in the indices that the new element or array will replace. You will see in Figure 1 how the order of the inputs is arranged.
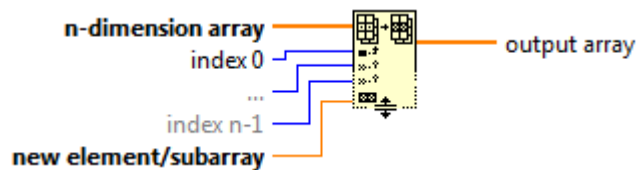

Figure 1

The first input is the array of dimension n and the last input is the new array or subset that will replace the target index. The middle inputs are all I32 values since they specify the target index or subset that the function will replace.

For example, Figure 2 shows how to wire an Old Array, the target index for replacement, and the New Array. In this case, the Old Array is fed into the Replace Array Subset function and the target index is 5. The new element(s) fed into the bottom input will then replace the entry(s) at index 5 and the new array will be passed to the output.
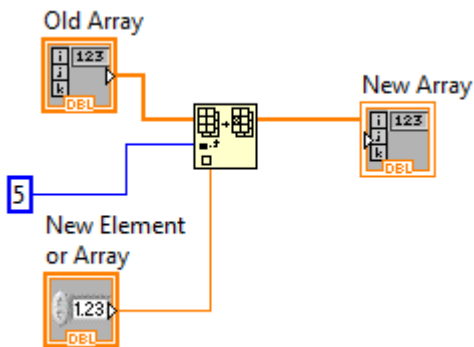

Figure 2

In the 2 dimensional case, the Replace Array Subset function will accept two I32 values that will specify the target index that the new element or sub-array will replace in the original array.

For example, in Figure 3 and Figure 4, if we want to replace the value at row index 3 and column index 3, we input the row index before the column index as wire in Figure 3. We can clearly see that

in the initialized 5 x 5 array of zeros, that the Replace Array Subset function changed the entry at
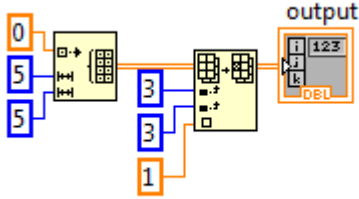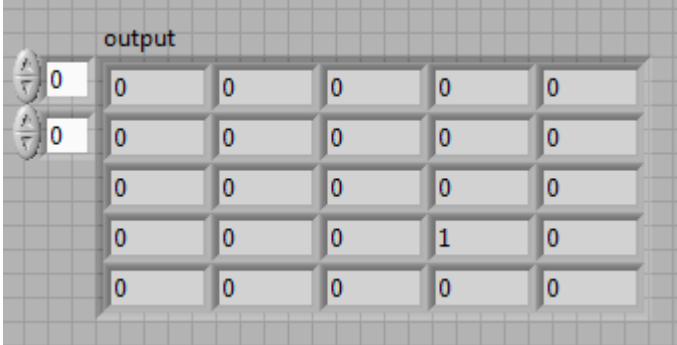row index 3 and column index 3 to one.

Figure 3

Figure 4

Generally for an n-dimensional case, we will need n input values to specify the replacement entry or
one value for each dimension of the array from 1 to n.