Subject: Reducing an array.
Posted by Joe[3] on Mon, 30 Sep 2002 22:23:08 GMT
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Hi- I'm somewhat new to IDL and was wondering what the most effiecient way is to 'OR' all the elements of an array together resulting in a scalar value. I'm hoping IDL has a built-in way of doing this rather than using a FOR-LOOP. Similar to how IDL has the TOTAL function which sums all the elements of an array together. I've used other languagues which allow you to 'reduce' arrays to a scalar using an arbitrary function (i.e. Python's reduce function).

What I am doing is taking a lot of integer data which is either 0's or 1's and compressing it into the bits of 64-bit unsigned integers. Here is a bit of sample code:

```
data = [1,0,0,0,1,1,1,0,1,0,1,0,0, ... , 0, 1, 0, 1] ; bunch of data, assume
# of elements is multiple of 64
shifts = reverse(indgen(n_elements(data))) MOD 64
compressed_data = ishft(data,shifts)
; here is where I want to take the compressed_data array and make it into a
; bunch (n_elements(data)/64, to be exact) of unsigned 64-bit integers by
OR'ing
; every 64 elements of compressed data togeter
```

Thanks for any help,
Joe