Subject: Re: Reducing an array.
Posted by Craig Markwardt on Tue, 01 Oct 2002 14:25:42 GMT
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MKatz843@onebox.com (M. Katz) writes:

```
> In order to perform an OR on 64 bits stored in an array, could you do
> something like this:
>
> a = [0,0,0,1,0,1,0,1,1]
> b = total(a) GT 0
>
> Then, if any of the elements of a are non-zero, b will be TRUE, or 1.
> At least I hope that's what you meant by OR.
>
> Likewise AND would be
> c = total(a) EQ n_elements(a)
```

The original poster was asking for a BITWISE "and" operation, not a logical "and" operation. He was interested in all the bits of the result, not just whether any bit was set.

Incidentally, "M"'s formulation is pretty much exactly what I use in my routine CMAPPLY, which applies selected operations, like AND and OR, to arrays.

Craig

-Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu
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