Subject: Re: Can I do this without using loops?
Posted by steinhh on Tue, 11 Jun 1996 07:00:00 GMT
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In article <4pcm41$64r@vixen.cso.uiuc.edu>, santanu@glibm5.cen.uiuc.edu (S Bhattacharyya) writes:
|> Regarding loops, I am kinda in the same boat. My advisor
|> keeps complaining about how slow our code runs...We don't seem to
|> know any better around here :-)
|>
|> Q1) I have a generic array foo(x,y). I'd like to divide each column
|>   by its max. Can this be done without looping ?
|>
|> Q2) I have a generic array foo=fltarr(a,b). I'd like to copy findgen(b)
|>   into every column. Any way of doing this without loops ?
|>

Q2 can actually be solved without loops, quite fast
(if I've understood your question correctly)

```
  foo = rebin(findgen(1,b),a,b,/sample)
```

The "solution" to Q1 is that the "array reduction" operations min/max (and others!) should get the same functionality as TOTAL, where you can choose which dimension to total over. If you have a MAX() like that, you could use something like (foo = foo(a,b))

```
   foo = foo / rebin(reform(max(foo,2),a,1),a,b,/sample)
```

or perhaps (to save some space):

```
   maxfoo = max(foo,2) ;; Max along each column
   foo = temporary(foo) / rebin(reform(maxfoo,a,1),a,b,/sample)
```

Stein Vidar