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Subject: Re: Can I do this without using loops?

Posted by [bowman](#) on Sat, 08 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) wrote:

> 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 ?

It is always the \*innermost\* loop that you need to worry about. Of course you want to avoid taking large strides in memory in the innermost loop, as well as using array syntax. A2 (below) should run very fast. I'm using the first quadrant convention for subscripts (i.e., (i,j) corresponds to (x,y), so to me a column is the second subscript. You may need to reverse that.

A1)

```
FOR i = 0, ni-1 DO foo(i,*) = foo(i,*)/MAX(foo(i,*))
```

A2)

```
FOR j = 0, nj-1 DO foo(*,j) = FLOAT(j)
```

Regards, Ken Bowman

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|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
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