Subject: Re: For loops vs. matrix operations
Posted by mperrin+news on Wed, 17 Dec 2003 23:05:08 GMT
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Jonathan Greenberg <greenberg@ucdavis.edu> wrote:
> I know some matrix programs perform better if you do straigh matrix math vs.
> a for-next loop -- is idl this way? E.g. is:
>
> array=intarr(10000)
> for i=0,(10000-1) do begin
> array[i]=array[i]+1
> endfor
>
> MUCH slower than:
>
> array=intarr(10000)
> array=array+1
>
> ?

Yes, the for loop version will be *vastly* slower. This is because IDL
makes a seperate trip through the parse/interpret cycle for every pass
through the for loop, greatly increasing the overhead.

> I'm trying to figure out how much time I should be using rewriting some code
> to optimize the algorithm, which is why I'm asking (the code is more complex
> than above, obviously, but I did notice I could "matricize" some of the code
> in places)...

Matricize as much as you possibly can!

- Marshall