Subject: Re: resizing an array of structures (uugh)
Posted by R.Bauer on Mon, 04 Jun 2001 18:22:14 GMT
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Randall Skelton wrote:
>
> Hi all,
>
> I have an ascii file containing a few thousand lines with each individual
> dataset comprising 10 lines of floats, ints, strings, etc. It seems
> logical to read this in as an array of structures as each dataset contains
> the same information, just different numbers.
>
> My problem is that I don't know what the dimension of the array should be
> before I start. Initially I just defined a large array and counted the
> number of datasets for subsequent processing. However, as time progresses
> and this code gets more use, I have to say that I really hate all the
> excess array elements... I figured there would be an easy way to resize
> the array of structures, but the best I can come up with is a double for
> loop that is rather slow.
>
> ; loop over the number of array elements
> for i, n_elements(array) do begin
> ; loop over the number of tags
> for j, n_tags(structure) do begin
> resized_array[i].(j) = array[i].(j)
> endfor
> endfor
>
> Is there a *faster* or more elegant way to do this? Does IDL have a
> *fast* resize command that can handle any type of array to simply adjust
> the number of elements in the array without rebinning, or otherwise
> changing the numbers?
>
> Cheers,
> Randall

Dear Randall,

IDL is an array orientated language. You should not use FOR statements
for the incrementation of array indices.

Here is a short summary of the syntax

array=sin(findgen(100))
array[*] all indices of array
array[10:*] index 10 to end of array
array[[0,2,4]] index 0 and 2 and 4 of array

array[0:counter-1] index 0 to counter-1 of array

array=[1,2]
array=[array,3,4] concatination of array

array=reform(array,[5,20]) reforms the vector to a 2-dim array

hope this helps a bit.

regards

Reimar

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a IDL library at ForschungsZentrum Jï¿½lich
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http://www.fz-juelich.de/zb/text/publikation/juel3786.html