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Subject: Re: how to get an array of variable length arrays

Posted by [dave](#) on Mon, 28 Nov 1994 23:22:15 GMT

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>>> > "James" == James Tappin <[sjt@xun8.sr.bham.ac.uk](mailto:sjt@xun8.sr.bham.ac.uk)> writes:

In article <[3bc8np\\$q64@sun4.bham.ac.uk](mailto:3bc8np$q64@sun4.bham.ac.uk)> [sjt@xun8.sr.bham.ac.uk](mailto:sjt@xun8.sr.bham.ac.uk) (James Tappin) writes:

James> [greek@essex.ac.uk](mailto:greek@essex.ac.uk) wrote: : Does anyone know how you can  
James> create an array of variable length : arrays?.

James> : e.g in C you could do it like this:

James> : float a[10],b[5],c[14]; : float \*arrays[3];

James> : arrays[0]=a; arrays[1]=b; arrays[2]=c;

James> : Thanks in advance for any help you can give.

James> : Chris

James> : [greek@essex.ac.uk](mailto:greek@essex.ac.uk)

James> The only thing I can think of would be to use a structure:  
James> e.g. for you example

James> a = fltarr(10) b = fltarr(5) c = fltarr(14) arrays = {f1:a,  
James> f2:b, f3:c}

James> You can then access the fields numerically by using the  
James> form: val = arrays.(n)(m)

James> But you can't then replace the f3 field with a 6 element  
James> array, you would have to make a new structure.

The structure approach is the simplest. You could get more  
flexibility with handles:

a = fltarr(10)& b=fltarr(5) &c=fltarr(14)  
arrays=lonarr(3)

array(0)=handle\_create(/value=a)  
array(1)=handle\_create(/value=b)  
array(2)=handle\_create(/value=c)

Of course, the handle mechanism is not as simple or elegant as the C

pointer mechanism, and you need to use handle\_value to access the elements.:

```
; get j=array(x,*):  
  
handle_value,array(x), j  
--  
David Fenyes           dave@image6.med.uth.tmc.edu  
University of Texas Medical School   Houston, Texas
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