
Subject: Re: Q: Indexing arrays with variable # dimensions

Posted by [rivers](#) on Thu, 10 Aug 1995 07:00:00 GMT

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In article <40civl\$neh@korfu.igd.fhg.de>, Tim Purschke <purschke> writes:

> i want to index an array with a number of dimensions that is not known

> until runtime.

> Creation of array:

> a = intarr(dimsz^dimnumber)

> dimidx = intarr(dimnumber) + dimsz

> a = reform(a, dimidx)

>

> Now i want to set an element of a to a certain value.

> eg. a(3,2,4,3) = 7 (for dimnumber = 4)

>

> how can i store this index list to make the assignment work?

> i've tried idx=[3,2,4,3] & a(idx) =7 but this of course does not work.

IDL lets one address multi-dimensional arrays as single-dimension arrays.

Thus, I think this is right:

idx = 3*dimsz^3 + 4*dimsz^2 + 2*dimsz + 3

a(idx) = 7

This can obviously be generalized if your array is not a hypercube, i.e. all of the dimensions are not the same.

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