Subject: Re: last array index subscript
Posted by James Kuyper on Thu, 23 Jan 2003 18:40:38 GMT
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Chad Bender wrote:
>
> Hi --
>
> Is there a way in IDL to directly reference the last element of a vector
> without first determining how many elements the vector contains?
>
> For example, something like:
>
> n=N_Elements(my_array)
> value=my_array[n-1]
>
> except without having to make the call to N_Elements. Granted, avoiding
> the N_Elements call probably doesn't save a lot of time. But I figured
> that with all of the complicated syntax that IDL accepts, there might be a
> direct way to do this. The Bldg Apps guide says you can extract a
> subarray from some element e to the end of the array like this:
>
> subarray=my_array[e:*]
>
> So it seems to me that IDL knows what that last index is. I tried
> something like:
>
> value=my_array[*-1], but (not unexpectedly) this caused a syntax error.
>
> I figure that what I want is probably impossible, but if anyone knows how
> to do it your advice is appreciated.

This doesn't have any advantages that I can see over the N_ELEMENTS
method; in fact, it's quite a bit less efficient; but it does work:

(reverse(my_array))[0]

Subject: Re: last array index subscript
Posted by kashyap on Thu, 23 Jan 2003 20:16:44 GMT
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Try

value=(my_array[[2147483647L]])[0]

where the "[[.]]" returns an array and the "(.)[0]" ensures that the
output is a scalar, and 2147483647L = 2L^(31L)-1L is the largest

possible I*4 number you can have and surely no will have an array
bigger than that.

vinay

In article <Pine.LNX.4.33.0301231237280.25514-100000@hapuna.ess.sunysb.edu>,
Chad Bender <cbender@mail.astro.sunysb.edu> wrote:
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> to do it your advice is appreciated.
>
> Thanks
> Chad Bender
>
>

--

_____
kashyap@head-cfa.harvard.edu 617 495 7173 [CfA/P-143] 617 496 7173 [F]

Subject: Re: last array index subscript
Posted by notspecified on Thu, 23 Jan 2003 20:33:09 GMT

On Thu, 23 Jan 2003 12:50:30 -0500, Chad Bender
<cbender@mail.astro.sunysb.edu> wrote:

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> without first determining how many elements the vector contains?
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> to do it your advice is appreciated.
>

Well, sigh, how about

last = my_array[(size(my_array))[1]-1]

Matt Feinstein does not include his email address
in the text of usenet postings.

Harvard Law of Automotive Repair: Anything that goes away
by itself will come back by itself.

Subject: Re: last array index subscript
Posted by hieninger on Fri, 31 Jan 2003 16:24:43 GMT

Hi Matt,

> Matt Feinstein does not include his email address
> in the text of usenet postings.

...are you sure about that?!
;-))

Harro

Subject: Re: last array index subscript
Posted by Doug Rowland on Fri, 31 Jan 2003 16:30:59 GMT
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Vinay,

How does this work? I tried to wrap my brain around this one. Is it an IDL "bug" or is there some simple rationale for IDL behaving this way? For example, if I try to directly subscript my_array with the scalar value 2147483647L (or any other number which is larger than the number of elements of my_array, less one) I get

IDL> print,my_array[2147483647L]
% Attempt to subscript A with <LONG (2147483647)> is out of range.
% Execution halted at: $MAIN$

Why should wrapping this index value in an array suddenly make it work?

Thanks.

Doug

In <3e304dac.0@cfanews.harvard.edu> Vinay L. Kashyap wrote:
> Try
>
> value=(my_array[[2147483647L]])[0]
>
> where the "[[.]]" returns an array and the "(.)[0]" ensures that the
> output is a scalar, and 2147483647L = 2L^(31L)-1L is the largest
> possible I*4 number you can have and surely no will have an array
> bigger than that.
>
> vinay
>
--

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