Subject: Re: Why does '[1,2,3] EQ [2]' yield zero but '[1,2,3] EQ 2' yield [0,1,0] ?
Posted by sujian on Sat, 02 Jun 2007 04:29:28 GMT
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On Jun 1, 10:18 pm, Gianguido Cianci <gianguido.cia...@gmail.com>
wrote:
> Hi all,
>
> The post title says it all. I thought "everything" in IDL was an
> array, but using [2] and 2 with relational operators is not
> equivalent...
>
> I searched the doc and newsgroup for quite a while, but obviously I
> did not come up with search terms that are specific enough.
>
> It took me a while to track this down in some code I was writing. My
> bug is now fixed *but* I don't understand why exactly. And we all know
> voodoo and IDL don't mix :-) can somebody clarify please?
>
> Many thanks,
> Gianguido
>
> PS: I have a feeling this issue came up not too long ago, just
> couldn't find it. Sorry :-(Feel free to dispense with this question
> with a link.

my guess:

[1,2,3] EQ [2] compares two sets, one with 3 elements and the other 1.

[1,2,3] EQ 2 compares each element of the first set with number 2.

Subject: Re: Why does '[1,2,3] EQ [2]' yield zero but '[1,2,3] EQ 2' yield [0,1,0] ?
Posted by wlandsman@jhu.edu on Sat, 02 Jun 2007 12:44:49 GMT
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> my guess:
>
> [1,2,3] EQ [2] compares two sets, one with 3 elements and the other 1.
>
I think the better rule to remember is that when comparing two vectors, IDL
will truncate the longer vector prior to the comparison so that the two
vectors have the same length.   So [1,2,3] EQ [2] is the same as [1] EQ [2].
For another example,

IDL> print, [1,2,3] eq [1,2]
  1   1

>
> [1,2,3] EQ 2 compares each element of the first set with number 2.
>
That is correct. --Wayne

Subject: Re: Why does '[1,2,3] EQ [2]' yield zero but '[1,2,3] EQ 2' yield [0,1,0] ?
Posted by cgguido on Sat, 02 Jun 2007 21:13:16 GMT
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On Jun 2, 12:29 am, suj...@gmail.com wrote:
> my guess:
>
> [1,2,3] EQ [2] compares two sets, one with 3 elements and the other 1.
>
> [1,2,3] EQ 2 compares each element of the first set with number 2.

I think Wayne (below) is correct, actually, since if you compare
[1,2,3] with 1 or [1] you get:

IDL> print, [1,2,3] eq 1
   1   0   0
IDL> print, [1,2,3] eq [1]
   1

It seems that [1,2,3] is truncated to one element.

Thanks to both of you for your help,
Gianguido