Subject: Is it possible to generate an error when it is tried to multiply matrix with different dimensions?

Posted by Victor[2] on Tue, 30 Jul 2013 10:15:52 GMT

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Hi everyone!

I want to know if it is possible to generate an error (or warnning) in IDL (using for instance de COMPILE OPT or something like that) when it is tried to multiply matrix with different dimensions.

for instance..

$$a = [1,2,3]$$
  
 $b = [1,2]$ 

The dimensions are different and if I do print,a\*b the result is [1,4] but in fact I want to know that the matrix are different.

It is a common error when I use a lot of matrix and could be good to know when this it happens (at least some warning...)

thanks!!

kind regards,

Víctor

Subject: Re: Is it possible to generate an error when it is tried to multiply matrix with different dimensions?

Posted by Michael Galloy on Tue, 30 Jul 2013 16:26:36 GMT

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On 7/30/13 4:15 AM, victor wrote:
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> Hi everyone!

>

>

- > I want to know if it is possible to generate an error (or warnning)
- > in IDL (using for instance de COMPILE\_OPT or something like that)
- > when it is tried to multiply matrix with different dimensions.
- > for instance..
- > a = [1,2,3] b = [1,2]
- > The dimensions are different and if I do print,a\*b the result is
- > [1,4] but in fact I want to know that the matrix are different.
- > It is a common error when I use a lot of matrix and could be good to
- > know when this it happens (at least some warning...) thanks!!

>

kind regards,

>

> Víctor

>

Not that I know of.

Mike

--

Michael Galloy

www.michaelgallov.com

Modern IDL: A Guide to IDL Programming (http://modernidl.idldev.com)

Research Mathematician Tech-X Corporation

Subject: Re: Is it possible to generate an error when it is tried to multiply matrix with different dimensions?

Posted by Phillip Bitzer on Tue, 30 Jul 2013 18:08:55 GMT

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You could always check before multiplying:

IF N\_ELEMENTS(a) EQ N\_ELEMENTS(b) THEN c= a\*b ELSE MESSAGE, "different number of elements"

and let your error handler "catch" the error.

An FYI - this isn't \*really\* matrix multiplication. What you're doing is multiplying each element of the arrays together. If you're interested in matrix multiplication, check out:

http://www.exelisvis.com/docs/Matrix Operators.html

Subject: Re: Is it possible to generate an error when it is tried to multiply matrix with different dimensions?

Posted by Victor[2] on Thu, 01 Aug 2013 07:04:52 GMT

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Sorry, I wrote the question bad, as you said I would want to control a multiplication of each element of the matrix (not a "classical" mathematical matrix multiplication)

And Yes, I knew that I can control the situation but I wanted to know if it is possible to work in the same way like Matlab ...

**Thanks** 

On Tuesday, July 30, 2013 8:08:55 PM UTC+2, Phillip Bitzer wrote:
> You could always check before multiplying:
> _
>
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