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Subject: Re: A simple vector - array operation  
Posted by [David Fanning](#) on Wed, 12 May 2010 15:29:45 GMT  
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francois writes:

- > Let say that I have an array A of 25 columns by 100 lines and a vector
- > V of 25 elements.
- > I want that each line of A takes the value of V such that:
- > for i=0, 99 do begin
- >   A[i,\*] = V
- > endfor
- >
- > What would be a fast way of doing this without using the FOR loop ?

a = Rebin(v, 25, 100)

Cheers,

David

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David Fanning, Ph.D.  
Fanning Software Consulting, Inc.  
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>  
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

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Subject: Re: A simple vector - array operation  
Posted by [Carsten Lechte](#) on Wed, 12 May 2010 15:35:52 GMT  
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francois wrote:

- > Let say that I have an array A of 25 columns by 100 lines and a vector
- > V of 25 elements.
- > ...
- > What would be a fast way of doing this without using the FOR loop ?

You could try A = REBIN( V, 25, 100) or A = TRANSPOSE( REBIN( V, 25, 100))

Depending on the sizes of the arrays and your RAM, this method should usually be faster than the loop.

chl

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Subject: Re: A simple vector - array operation  
Posted by [Timm Weitkamp](#) on Wed, 12 May 2010 16:21:38 GMT  
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On May 12, 5:35 pm, Carsten Lechte <c...@toppoint.de> wrote:

> You could try `A = REBIN( V, 25, 100)` or `A = TRANSPOSE( REBIN( V, 25, 100))`

Instead of the latter, `A = REBIN(TRANSPOSE(V), 100, 25)` may be slightly more efficient.

But you can also use a matrix multiplication: `A = MAKE_ARRAY(100, VALUE=1) # V`

The question whether the REBIN or the matrix multiplication is faster is not easy to answer. It will depend on number of elements and on the hardware and software configuration you are using.

Timm

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