Subject: Re: row calculation in a 2D array Posted by Vap User on Mon, 31 Aug 1998 07:00:00 GMT

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The general case may be hard, if not impossible. Depends on what you mean by 'operation' below. To do it generally probably requires that the operation be a linear combination of the elements of the arrays. Anyway, this will work to find the average.

if A is your 10 by 10 array.

tmpA=A[3:6,*]; the sub-array

avg=replicate(1, 4)##transpose(tmpA)/4.; the average.

or, equivalently, but transposed,

avg = transpose(replicate(1,4))#tmpA/4.

You should almost always be able to replace loops of summations with the '#' (or '##') operator and a judicicious choice of multiplicand.

whd

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> Probably a damn simple one, but anyway:
> I want to perform the same operation on each sub-row in a 2D array.
> Say I want to calculate the mean of element 4-7 in each row of a 10x10
> array, and store the result in a 10 element-vector, where each element holds
> the mean from the respective row
> how is this done the smartest way, without using time-consuming loops?
> sincerely
> Jonas
> Udon't speak for JPL, it doesn't speak for me.
Well, not all the time, at least.
William Daffer <vapuser@haifung.jpl.nasa.gov>
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[&]quot;Jonas" <jonas_2@hotmail.com> writes: