

Subject: Re: Need efficient routine to calculate max of two arrays

Posted by pa64 on Thu, 26 Jan 1995 14:25:37 GMT

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In article <3g3p8i\$1o6@cobra.aer.com>, gallery@aer.com (William O. Gallery) writes:

|> Here is the problem:

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|> There are two arrays: a and b of equal length, I want to calculate

|> an array c of the same length so that:

> $c(i) = \min(a(i), b(i))$

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|> For efficiency, I want to use vectors and not a do loop.

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|> Any suggestions? This would seem to be a common enough problem,

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$\sqrt{v} \approx$

|> William O. Gallery gallery@aer.com

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Up to four arrays, the following function seems to be quite efficient:

```

function pmin,im1,im2,im3,im4
if n_params() gt 3 then begin
  index = where(im4 lt im3, count)
  if count gt 0 then im3(index) = im4(index)
endif
if n_params() gt 2 then begin
  index = where(im3 lt im2, count)
  if count gt 0 then im2(index) = im3(index)
endif
if n_params() gt 1 then begin
  index = where(im2 lt im1, count)
  if count gt 0 then im1(index) = im2(index)
endif
return,im1
end

```

Regards,

Hermann Mannstein

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