
Subject: Need efficient routine to calculate max of two arrays

Posted by [gallery](#) on Tue, 24 Jan 1995 20:51:30 GMT

[View Forum Message](#) <> [Reply to Message](#)

Here is the problem:

There are two arrays: a and b of equal length, I want to calculate an array c of the same length so that:

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

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

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

--

William O. Gallery

gallery@aer.com

Atmospheric & Environmental Research

Voice(617) 349-2284

840 Memorial Drive

(617) 547-6207

Cambridge, Massachusetts 02139

FAX (617) 661-6479

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

Posted by [sjt](#) on Fri, 03 Feb 1995 13:51:59 GMT

[View Forum Message](#) <> [Reply to Message](#)

William O. Gallery (gallery@aer.com) wrote:

: Here is the problem:

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

: an array c of the same length so that:

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

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

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

: --

: William O. Gallery

gallery@aer.com

: Atmospheric & Environmental Research

Voice(617) 349-2284

: 840 Memorial Drive

(617) 547-6207

: Cambridge, Massachusetts 02139

FAX (617) 661-6479

I've not been following this thread so someone else may already have

given this answer which is I believe the cleanest and most efficient:

$c = a < b$

for the problem as stated and

$c = a > b$

for the problem implied in the title.

--

--

```
+-----+-----+-----+
| James Tappin,      | School of Physics & Space Research | O__ |
| sjt@star.sr.bham.ac.uk | University of Birmingham    | -- V |
| Ph: 021-414-6462. Fax: 021-414-3722    | |
+-----+-----+-----+
```
