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Subject: Re: Need a function to multiply the elements of an array

Posted by [VUKOVIC](#) on Fri, 28 Apr 1995 07:00:00 GMT

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In <3nohst\$sun@pinot.umd.edu% barsam@Glue.umd.edu writes:

```
% In article <3nm2uk$qqq@pinot.umd.edu%,
% I wrote:
% %
% %Hi,
% %
% %I am looking for a routine to multiply the elements of an array.
% %Is there a faster way of doing it than the following?
```

```
% %
% %
% %function prod, x
% %n = n_elements(x)-1
% %z = 1.d0
% %for i = 0, n do z = z * x(i)
% %return, z
% %end
```

```
% %
% %
% %
% %BM
```

```
% %
%
```

```
% Thanks for the replies.
```

```
%
% z = exp(total(alog(x))) gives me about 60% savings. Not terribly
% fast but obviously better than the "for" loop.
```

```
%
% BM
%
%
```

That is strange (or I am strange), but I would think naively expect that in the "for" loop you have only N multiplications, while taking log of each number gives you M\*N multiplications, where M is the number of multiplications used to evaluate the log of a number.

I guess if going for speed, it would be fairly simple to write a fortran/c routine to do it

Mirko

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