Subject: Re: multiplication
Posted by James Kuyper on Tue, 28 Mar 2000 08:00:00 GMT
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meron@cars3.uchicago.edu wrote:
>
> In article <38E03BDC.868B8396@hotmail.com>, marc <m_schellens@hotmail.com> writes:
>> Is there a function like TOTAL but for multiplication.
>> Like the big PI symbol in mathematical notation.
>> Or this really something for the for loop?
>>
>> I.E.
>>
>> a=[1,2,3,...]
>>
>> result=a[1]*a[2]*a[3]...
>>
> if all the elements of a are positive then you can simply do
>
> result = exp(total(alog(a)))
...
> If some of the elements are negative, you can still handle it. do
>
> dum = where(a lt 0, ndum)
> sig = (-1)^ndum
> result = sig*exp(total(alog(abs(a))))

You can't honestly be suggesting that this is a good technique? Ignore for a momement what happens if any element of 'a' is 0. That code performs two transcendental function evaluations per element of 'a'. IDL would have to be very badly engineered (which I suppose is possible), for a 'for' loop to execute more slowly than your code.