
Subject: Re: "ALOG2" ?

Posted by [steinhh](#) on Tue, 06 Apr 1999 07:00:00 GMT

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David Fanning wrote:

[..about the tricky solution $\text{alog}(x)/\text{alog}(2.0)$ instead
of writing a DLM...]

> MUCH more billable and difficult! Are you looking for
> a job? I like your style. :-)

Uh - blush :-)

One rule among my friends is "never try to explain when someone
else has decided you've done a blunder - you're only gonna make
it worse" :-)

det blir bare verre" :-)

But nevertheless, I would like to say in my "defence" that when
such a question comes from Amara Graps, I don't expect the
solution to be trivial!

And she did ask for something that works like the C functions
`logb` and `frexp`, which don't actually compute the log in base 2!

`logb()` returns the integer part of \log_2 (but as a float/double,
to enable signalling of $\pm\infty$), whilst `frexp(a,i)` sets `i`
to `logb(a)+1` and returns $a/2^i$...

Not that I expect anyone to go for this line of defence... :-)

But I did learn something valuable about writing DLM's: Forget
the `IDL_EzCall()` routine for processing parameters.

You're much better off doing whatever is necessary (like
ensuring the data is of the correct type/dimensionality etc)
"manually" through the `IDL_ENSURE_xxx/IDL_EXCLUDE_xxx` macros,
instead of spending an endless amount of time trying to figure
out exactly what goes on inside `IDL_EzCall`...

This is much like the `CW_PDMENU` discussion we had a while ago,
only worse. And do watch out for problems with recursive
routines if you're using the `IDL_EzCall` routine!!

And I just found out how to create a named variable inside
a DLM: Use the `IDL_FindNamedVariable` routine.

Well hidden functionality, if you ask me! Most users would search for something along the lines of "IDL_Make..." or "IDL_Get..." like I did for quite a while...

Stein Vidar
