Subject: Re: Yet another bug??
Posted by lmudge on Fri, 19 May 1995 07:00:00 GMT
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In article 95May17132737@peace.med.ohio-state.edu, phil@peace.med.ohio-state.edu (Phil) writes:
> Sorry to keep posting but I've just started developing some useful
> tools in IDL and it seems I run across a new 'bug' every day. Could
> someone tell me the sense behind the following:
>
> IDL> print, not 0
>   -1
> IDL> print, not 1
>   -2
>
> Shouldn't (not 0) = 1 and (not 1) = 0 or am i just missing something?
> Is there somehting in the manuals that describes this logic?
>
> Just wondering.
>
>
> --
> /*** ***************/
>   Phil Williams
>   Postdoctoral Researcher   "One man gathers what
>   MRI Facility   another man spills..."
>   The Ohio State University   -The Grateful Dead
>   email: phil@peace.med.ohio-state.edu
>   URL: http://justice.med.ohio-state.edu:1525
> /*** ***************/

One must thing in binary terms to understand what is happening here.
Integer variables in IDL uses twos complement binary arithmetic thus the
binary representation of 0 is 0000000000000001. When we perform a not on this
we get 1111111111111110 which is the twos complement representation for -1.
Try doing this:

not float(1)

and

not float(2)

and see what you get.

Regards,

Leith Mudge

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