Subject: Re: -32768
Posted by Lajos Foldy on Sat, 22 Mar 2014 20:58:16 GMT
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On Saturday, March 22, 2014 9:20:36 PM UTC+1, Dick Jackson wrote:
> On Friday, March 21, 2014 11:02:08 AM UTC-7, Yngvar Larsen wrote:
>
>> On Friday, 21 March 2014 00:44:17 UTC+1, Chris Torrence wrote:
>
>>> On Thursday, March 20, 2014 3:30:49 PM UTC-6, Yngvar Larsen wrote:
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>>
>
>>> Jim P. is correct that the minus sign is really an operator. So it really is a runtime error to write "a = 32768s", regardless of whether you are then going to take the negative of it.
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>
>> Fair enough. In that case, what is missing is a way to enter a literal negative number. "-376768" _is_ a valid 16-bit signed integer after all! Not really a problem, since negation of a single number hardly is a big performance hit... Also, the OPs problem hasn't hit me at all during the 15+ years I've been using IDL. And there are at least 3 simple (bit silly) workarounds, already mentioned in this thread.
>
>
>
> And for our further pedantry, if you really need to know which is most time efficient (at least on my MacBook, IDL 8.2):
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>
>
> IDL> tic & for i=1,1e7 do a=FIX(-32768) & toc
>
> % Time elapsed: 1.7954290 seconds.
>
>
>
> IDL> tic & for i=1,1e7 do a=FIX('8000'X) & toc ; Hex code depends on hardware "endian-ness"
>
> % Time elapsed: 1.4319592 seconds.
>
>
>
> IDL> tic & for i=1,1e7 do a=not 32767S & toc

>
> % Time elapsed: 1.1942451 seconds.
>
>
>
> IDL> tic & for i=1,1e7 do a=-32767S-1S & toc ; The winner!
>
> % Time elapsed: 1.1435649 seconds.
>
>
>
> Notice how much longer this takes compared to a simple, positive literal:
>
>
>
> IDL> tic & for i=1,1e7 do a=32767S & toc
>
> % Time elapsed: 0.39454412 seconds.
>
>
>
> Cheers,
>
> -Dick
>
>
>
> Dick Jackson Software Consulting Inc.
>
> Victoria, BC, Canada --- www.d-jackson.com

I think the winner is: a='8000'XS

regards,
Lajos
