Subject: Re: Float procedure
Posted by Liam Gumley on Wed, 02 Dec 1998 08:00:00 GMT
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Charlie Solomon wrote:
> Can anyone shed some light on how this byte array is converted into a
> floating point number?
> two_words = bytarr(4)
> two_words = [244, 232, 165, 64]
> IDL> print, two_words, format = '(z)'
> f4
> e8
> a5
> 40
> IDL> print, float(two_words, 0)
> 2.13062e-038
>
> On my computer at work (NT4, x86) I get a different value...5.18469
> Here at home (Win98, x86) I get this really small number....
> IDL> print, !version
> { x86 Win32 Windows 5.1.1 Jul 20 1998}

In addition to Alex Schuster's comments, the only suggestion I have is to use the HELP routine to keep track of variable types, e.g.

```
IDL> two_words = bytarr(4)
IDL> help, two_words
TWO_WORDS       BYTE      = Array[4]
IDL> two_words = [244, 232, 165, 64]
IDL> help, two_words
TWO_WORDS       INT       = Array[4]
```

One of the most important things to learn in IDL programming is the transient nature of variable types. Frequent use of HELP both on the command line *and* within your IDL programs is a very effective way to help ensure your IDL code works the way you intended.

Cheers,
Liam.

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