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Subject: Re: byteorder for float numbers conversion

Posted by [Thomas A. McGlynn](#) on Thu, 06 Feb 1997 08:00:00 GMT

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Peter Suetterlin wrote:

```
>
> In article <5d8mo8$98@elaine44.stanford.edu>,
>   yafeng@leland.Stanford.EDU (Meili Zhong) writes:
>
>> I want to convert the float numbers from UNIX format(big-edian)
>> to PC format(small-edian). For example, I have a float array
>> data(420)
>
> byteorder, data, /lswap
>
> Or have a look at the /XDR Keyword for opening files.
>
> Peter
>
> Peter "Pit" Suetterlin
```

I've had lots of problems with the byteorder routine. It's been broken on a number of versions of IDL on Dec hardware and some PC versions.

If you actually know that you just want to invert data of a given type you can do things like:

```
float x[100];
qinvers = float(rotate(byte(x,0,4,100),5),0,100)
```

to invert bytes. You can look at the IDL astronomy library routines `host_to_ieee` and `ieee_to_host` at

<http://idlastro.gsfc.nasa.gov/ftp/pro/misc>

to see if any machines/IDL versions you're interested in have errors in their byteorder implementations. There do seem to be some problems indicated for linux and Windows versions of IDL. These routines try to take care of these little gotcha's in a generic way.

Good luck,

Tom McGlynn  
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