Subject: Re: simple question about bytes
Posted by meron on Thu, 02 Sep 1999 07:00:00 GMT
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In article <37CEA812.98FA89F3@zedat.fu-berlin.de>, rappold <rappold@zedat.fu-berlin.de>
writes:
> Hi,
>
> I want to check if a line in an ascii file starts with a number or
> character. My idea was to read the first character and convert it to
> "byte" and check if its in or out the range of '48b' and '58b'. The code
> example is :
>
>   ; check for header
>   header=''
>   readf, lun, header
>   firstchar=strmid(header,0,1)
>   first_byte=byte(firstchar)
>
>   no_head=0
>   head_index=0
>   WHILE ((first_byte LT 48b) AND (first_byte GT 57b)) DO BEGIN
>   readf, lun, header   ; reads next line
>   head_index=head_index+1 ; counts header lines
>   no_header =head_index
>   ENDWHILE
> ...
>
> it compiles fine but on runtime I get the errormessage :
>
>   Expression must be a scalar in this context: <BYTE   Array(1)>
>
> How can I change the variable 'first_byte' from byte array to a byte
> scalar ?
>
OK, the problem is simple. The command

>   first_byte=byte(firstchar)

Generates an array (of length 1, but still an array), something you
can easily ascertain by doing

 print, size(first_byte)

The work around is also simple. Replace the offending line by

>   first_byte=(byte(firstchar))(0)

Mati Meron | "When you argue with a fool,
meron@cars.uchicago.edu | chances are he is doing just the same"

Subject: Re: simple question about bytes
Posted by Craig Markwardt on Thu, 02 Sep 1999 07:00:00 GMT
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rappold <rappold@zedat.fu-berlin.de> writes:
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The byte() function converts a string to a byte array. In this case
the byte array has a length of one.

Which gets me to my second point. For some reason, conditional
expressions are not acceptable by IDL if they are 1-element arrays.
The remedy is the following:

    WHILE ((first_byte(0) LT 48b) AND (first_byte(0) GT 57b)) DO BEGIN

Which gets me to my third point. You don't seem to be recalculating
first_byte in the loop. You will probably end up reading the whole
file before failing.

Good luck,

Craig

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Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
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