Subject: Re: converting to array

Posted by davidf on Mon, 12 Mar 2001 19:53:23 GMT

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Martin Skou Andersen (skou@fys.ku.dk) writes:

- > I have some data from a file...
- > example:
- > file start
- > 10.5 30.5 40.8 57.9 90.8

>

- > end of file
- > I would like to read these data from a file, and these should be placed
- > in a array...
- > But when I read the file the datas are placed in a string. How do i get
- > these data converted to a array?

array = FltArr(5); Or, however many values you have.

OPENR, lun, 'myfile.dat', /Get_LUN

READF, lun, array

FREE LUN, lun

Cheers.

David

--

David Fanning, Ph.D.

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Coyote's Guide to IDL Programming: http://www.dfanning.com/

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: converting to array

Posted by hahn on Tue, 13 Mar 2001 13:18:03 GMT

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davidf@dfanning.com (David Fanning) wrote:

- > array = FltArr(5); Or, however many values you have.
- > OPENR, lun, 'myfile.dat', /Get LUN
- > READF, lun, array
- > FREE_LUN, lun

This is the shortest solution. However, I would read these values into a string, count the words there and then use ReadS to retrieve the data from the string.

Subject: Re: converting to array

Posted by davidf on Tue, 13 Mar 2001 14:19:54 GMT

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Norbert Hahn (hahn@hrz.tu-darmstadt.de) writes:

- > This is the shortest solution. However, I would read these
- > values into a string, count the words there and then use
- > ReadS to retrieve the data from the string.

Why, for Heaven's sake!?

Cheers.

David

--

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Subject: Re: converting to array

Posted by hahn on Wed, 14 Mar 2001 10:32:51 GMT

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davidf@dfanning.com (David Fanning) wrote:

> Norbert Hahn (hahn@hrz.tu-darmstadt.de) writes:

>

- >> This is the shortest solution. However, I would read these
- >> values into a string, count the words there and then use
- >> ReadS to retrieve the data from the string.

>

> Why, for Heaven's sake!?

There are several ways to read numeric data and the method to read them should be base on how they are written.

1) If the data is written by a program that I can put my hand on, I usually read the data under format control.

2) If the data comes from some unknown source I prefer to read the data into a string at first and analyze that string. This is to prevent program breaks due to wrong data.

I prefer a program break and some meaningful messages over a quietly reading program that calmly digests wrong data.

Norbert

Subject: Re: converting to array
Posted by Pavel A. Romashkin on Wed, 14 Mar 2001 17:06:49 GMT
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Norbert Hahn wrote:

- > 1) If the data is written by a program that I can put my
- > hand on, I usually read the data under format control.

>

- > 2) If the data comes from some unknown source I prefer to
- read the data into a string at first and analyze that
- > string. This is to prevent program breaks due to wrong
- > data.

I am sorry, but I am not with you on this one.

I deal with bizarre file formats all the time. None of them are written by programs I can get my hand on. Most have over 100,000 data records, some have more. If I read all that via string parsing, I still would be reading the files, months after I started :-(

My approach is, if I can comprehend the file format, I use a formatted read as close to the data structure as possible. IDL can read a 10 column by 100,000 rows numeric array from a file in split second. But to loop through 100,000 rows, read a string each time ans READS will take minutes at least.

The drawback is, it might take effort to figure out the optimal way to create the format itself. But it pays off tenfold, if you have more than one file to read.

But, like everything else, it is all the matter of personal preference.

Cheers, Pavel