Subject: error with sort
Posted by R.Bauer on Mon, 10 Jan 2000 08:00:00 GMT
View Forum Message <> Reply to Message

Hi,

SORT() is not platform independent!!!!!

Try this:

```
** Structure !VERSION, 5 tags, length=40:
   ARCH            STRING    'x86'
   OS              STRING    'Win32'
   OS_FAMILY       STRING    'Windows'
   RELEASE         STRING    '5.2'
   BUILD_DATE      STRING    'Oct 30 1998'
```

OR

```
* Structure !VERSION, 5 tags, length=40:
   ARCH            STRING    'x86'
   OS              STRING    'Win32'
   OS_FAMILY       STRING    'Windows'
   RELEASE         STRING    '5.3'
   BUILD_DATE      STRING    'Nov 11 1999'
```

```
a=[1,1,1,1,1]
idx=sort(a)
PRINT,idx

1          2          3          4          0
```

```
b=['A','B','C','D','E']
PRINT,b[idx]

B C D E A
```

```
** Structure !VERSION, 5 tags, length=40:
   ARCH            STRING    'ibmr2'
   OS              STRING    'AIX'
   OS_FAMILY       STRING    'unix'
   RELEASE         STRING    '5.2.1'
   BUILD_DATE      STRING    'Jun  4 1999'
```

```
a=[1,1,1,1,1]
idx=sort(a)
PRINT,idx

 1        0        2        4        3


b=['A','B','C','D','E']
PRINT,b[idx]

B A C E D
```

==========

R.Bauer

File Attachments

1) R.Bauer.vcf, downloaded 95 times

Subject: Re: error with sort
Posted by Julie Greenwood on Thu, 13 Jan 2000 08:00:00 GMT
View Forum Message <> Reply to Message

Martin Schultz <martin.schultz@dkrz.de> wrote in message
> For this purpose, I have written a multisort routine that is (hopefully)
> still available at
> http://www-as.harvard.edu/chemistry/trop/staff/mgs/idl
> This allows "hierarchical" sorting for (I believe) up to 5 variables.

It seems to now be at:
http://www-as.harvard.edu/people/staff/mgs/idl/

Julie

~~~~~~

Juliet G. Greenwood
Senior Programmer
Oceanweather Inc.
JulieG@Oceanweather.com
http://www.oceanweather.com/
~~~~~~

Subject: Re: error with sort
Posted by Martin Schultz on Thu, 13 Jan 2000 08:00:00 GMT
View Forum Message <> Reply to Message

landsman@my-deja.com wrote:
>
> If you are worried about what SORT does to equal values, you might
> instead want to use the program bsort.pro, available at
>
> ftp://idlastro.gsfc.nasa.gov/pub/pro/misc/bsort.pro
>
> This procedure ensures that equal values are always maintained in the
> initial order, i.e.
>
> IDL> print,bsort()
> 0 1 2 3 4
>
> One place where this procedure is useful is when you are sorting on more
> than one parameter. For example, suppose you have a set of
> temperature and pressure measurements (T, P), and want the primary sort
> to be by temperature -- but whenever temperatures are equal, you want
> the values sorted by pressure. One can do this as follows:
>
> i1 = sort(P) ;Secondary sort on pressure
> i2 = bsort(T) ;primary sort on temperature
>
> and i2 will give the desired indexing.
> Of course, BSORT will be slower than the intrinsic SORT function.
>
> Wayne Landsman landsman@mpb.gsfc.nasa.gov

For this purpose, I have written a multisort routine that is (hopefully)
still available at
http://www-as.harvard.edu/chemistry/trop/staff/mgs/idl
This allows "hierarchical" sorting for (I believe) up to 5 variables.

Usage: multisort,array,index= [,revert=[0,1,0]]
to sort a >= 3-dimensional array for primary key 'column 2', secondary
key 'column 1' and tertiary key 'column 3'. The revert option allows you
to do an inverse sort for any hierarchy level.

I'd be interested to know how multisort performs compared to the bsort
method you proposed.

Cheers,
Martin

--
[[[[[[[[[
[[Dr. Martin Schultz   Max-Planck-Institut fuer Meteorologie   [[
[[Bundesstr. 55, 20146 Hamburg   [[
[[phone: +49 40 41173-308   [[
[[fax: +49 40 41173-298   [[
[[martin.schultz@dkrz.de   [[
[[[[[[[[[