
Subject: Re: Sort

Posted by [savoie](#) on Wed, 05 Nov 1997 08:00:00 GMT

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Neil Winrow <ncw@dl.ac.uk> writes:

> Can anybody please offer their help!

> I have three sets of data, X, Y, Z. I read these sets of data into one
> big array. I would like to sort one of the sets of data within the big
> array, lets say sort the Z data. Is it then possible for the
> corresponding values in the X and Y to also sort to the correct values.
> Hope someone can understand, and offer me a solution.

Neil,

I think you're looking for something like this?

```
IDL> x = indgen(10)
IDL> y = indgen(10) * 2
IDL> z = randomu(seed,10) *10
IDL> print, x
  0   1   2   3   4   5   6   7   8
  9
IDL> print, y
  0   2   4   6   8  10  12  14  16
 18
IDL> print, z
  9.42273   7.87034   6.82765   2.36464   2.45571   3.17787
  0.410162   3.58485   0.540125   7.87818
IDL> sortindex = sort(z)
IDL> print, sortindex
   6   8   3   4   5   7
   2   1   9   0
IDL> print, z(sortindex)
  0.410162  0.540125  2.36464  2.45571  3.17787  3.58485
  6.82765  7.87034  7.87818  9.42273
IDL> print, x(sortindex)
   6   8   3   4   5   7   2   1   9
   0
IDL> print, y(sortindex)
  12  16   6   8  10  14   4   2  18
   0
```

The key is that the IDL sort routine returns an array of indices into the array to be sorted. So that by using the array subscripted by the

indices, you get the sorted array.

Hope this helps.
matthew

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Matthew H. Savoie
Systems Analyst
ph. 303.497.6642

Systems Technology Associates
Supporting NOAA Profiler Network
Demonstration Division/FSL/ERL

mailto: savoie@fsl.noaa.gov <URL:http://www-dd.fsl.noaa.gov/online.html>
