Subject: Multi-column sort
Posted by Percy Pugwash on Thu, 01 Mar 2012 15:02:06 GMT
View Forum Message <> Reply to Message

I would like to sort a 2D string by column, specifying primary, secondary and further sort criteria (i.e. rows which are equal based on criterion 1 are sorted by criterion 2).

Is there any neat way to do this in IDL?

I'd thought of using the following:

tosort = [3,1,5]; Sort by column 3, then 1, then 5
maxlen = max(strlen(sortarray[tosort,*])); Length of longest string
paddedarray =
string(sortarray[tosort,*],format='(a'+string(maxlen,format='(i0)') +
')'); Pad all strings to match longest length
concatarray = paddedarray[0,*]
for i = 0, n_elements(tosort)-1 do concatarray += paddedarray[i,*];
Concatenate strings across columns
indices = sort(concatarray); Sort the concatenated strings

However, this method does not allow me to specify which direction the sort should go for each of the sort columns. Can anyone think of a way to extend the method to allow this (or a completely different method which achieves the same effect!)?

Thanks,

Ρ