
Subject: Re: sorting string arrays - non alphabetic and user defined order

Posted by [greg michael](#) on Tue, 17 Oct 2006 07:14:18 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi,

It seemed much more fun when I thought we were talking about dwarves...

I'm not sure I understnad what you're asking in the new post. It seems to me that in my code 'namelist' is your NamelistB, and mylist is NamelistC. NamelistA is superfluous to the problem, isn't it?

Here's a modified code to show what I mean - NamelistA has a couple of extra entries, but I never use it. Even if they are present in mylist (NamelistC), they will be ignored when filtered with mylist (NamelistB). Even a double entry will turn up only once.

```
namelistA=['Sneezy','Daddy','Groggy','Dopey','Ally','Curry',  
'Emmy','Bully','Jockey','Hippy','Itchy','Fluffy']
```

```
namelist=['Daddy','Groggy','Ally','Curry','Emmy','Bully','Jo ckey','Hippy','Itchy','Fluffy']
```

```
mylist=['Emmy','Fluffy','Itchy','Jockey','Groggy','Groggy',' Sneezy']
```

```
n=n_elements(namelist)
```

```
m=n_elements(mylist)
```

```
a1=rebin(transpose(indgen(m)),n,m)
```

```
a2=rebin(indgen(n),n,m)
```

```
s=mylist[a1] eq namelist[a2]
```

```
result=namelist[where(total(s,2) gt 0)]
```

```
IDL> print,result
```

```
Groggy Emmy Jockey Itchy Fluffy
```

'result' will automatically have the right size and be indexed from zero upwards - you don't need to worry about declaring it beforehand. Or have I missed what you're asking?

regards,
Greg

metachronist wrote:

> Hi Greg,

>

> Thank you for your quick response, it is much appreciated. Your method
> works fine. I am afraid I left out of couple of questions related to
> the problem.

>

> Is there a way to dynamically allocate arrays (varying size) ?

> Specifically, this is what I am trying to do.
>
> #1
>
> I have a station database. This "string" array contains details
> pertaining to all the stations (names,locations,code etc.). Let's call
> this NAMELIST 'A'
>
> #2
>
> Now, I made a list of stations I want to look at from the above
> database. Let's call this NAMELIST 'B'
>
> #3
>
> The list of stations provided to me (NAMELIST 'C') may or may not
> contain all the stations in namelist 'B'
>
> #4
>
> I make a 1-1 string match between namelists 'B' and 'C' and extract
> only those stations that are present in B and C, and order C similar to
> B (user defined non-alphabetic)
>
> #5
>
> Problem is: I know the dimensions of the string array 'B' because I get
> to choose the stations I want from the original big database. Now, I
> don't know the dimensions of 'C' because it is variable, it may have
> same dimensions as B or less than B or none at all and the order might
> vary. Since, it can "ALSO" have same dimensions of B (max possible
> dimension), I define
>
> C=strarr(n_elements(B))
>
> But when the dimensions are less than that in B, there are elements
> with 'strlen' equal to zero. For example, C[3] maybe empty and may be
> C[7] and all other elements of the array may be filled.. I want to get
> rid of these trailing/beginning/in between empty (zero length) elements
> (I know this is because of the above declaration)
> and make this array to have dimensions = # of non-zero elements
>
> Is there a way to tackle such situations? I tried to index and
> increment the # of non-zero elements and redeclare the dimensions of C
> to be # of non-zero elements.. But it didn't work.. Meanwhile, I will
> try to modify your code to see if it works for my need.
>
> I appreciate your time and help!

> Thanks much,
> ~rk
