Subject: Re: Finding Common Elements in Two Arrays
Posted by stl on Thu, 02 Jun 1994 06:26:38 GMT
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In article <1JUN199416454238@stars.gsfc.nasa.gov> kucera@stars.gsfc.nasa.gov (Terry Kucera) writes:
> I'm looking for a quick way to compare two arrays in IDL, A and B,
> and determine which elements of B are also in A,
> so if:
> A=[2,1,3,5,3,8,2,5]
> B=[3,4,2,8,7,8]
> I would get [0,2,3,5], because 3, 2, and 8 are in A as well as B.
>
> I can do this with loops, but that takes too long for big arrays. Does anyone
> have a way to do this using array functions or perhaps an external routine?

I just discovered (a few weeks ago) that this is a very usefull function! I was forced to use one loop (not sure if used one or two because you mention above 'loops'). If there is an array function I would LOVE to see it cause I need to do this LOTS of times, with arrays of up to 10,000 elements!

Here is what I did:

```
 index = 0
 for i = 0,n_elements(b)-1 do begin
  set = where(a eq b(i))
  if set(0) ne -1 then index = [index,set]
 endfor
 ;get ride of the first 0!
 if n_elements(index) gt 1 then index = index[1:*] $
 else index = -1
```

for huge array, this is a bummer to have to do over and over! I am interested in an discussion and better solutions to this seamingly trivial but painfull little problem.

-stephen
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01 256 93 85 / (and pray for snow)