Subject: Re: Finding Common Elements in Two Arrays
Posted by zawodny on Thu, 02 Jun 1994 14:17:08 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?
> Terry Kucera
> kucera@stars.gsfc.nasa.gov

If you are dealing strictly with integers, I'd use histogram on both vectors, multiply them together and then use where to find non-zero values.

```
Hist_a = histogram(a,max=maximum_expected_value)
Hist_b = histogram(b,max=maximum_expected_value)
Inter  = where(Hist_a*Hist_b)
```

and Inter should then contain the array you seek.

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