Subject: Re: Vector comparison.
Posted by R.Bauer on Thu, 20 Nov 2003 01:50:04 GMT

hunter wrote:

> Hello,
>
> These seems to be a fairly simple problem but I'm having difficulty coming
> up with an elegant solution.
>
> Let's say I have two vectors of type integer:
>
> A=[0,1,3,3,3,6,7,9,9]
> B=[3,7]
>
Dear Eli

Here are some useful routines

 http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_source/idl _html/dbase/download/a_and_b.tgz
 http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_source/idl _html/dbase/download/a_or_b.tgz
 http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_source/idl _html/dbase/download/a_not_b.tgz
 http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_source/idl _html/dbase/download/a_xor_b.tgz
 http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_source/idl _html/dbase/download/veklogik.tgz
 http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_source/idl _html/dbase/download/indexlogic.tgz

```
print,a_and_b(a,b)
     3     7
print,a_or_b(a,b)
     0     1     3     6     7     9
print,a_not_b(a,b)
     0     1     6     9
print,a_xor_b(a,b)
     0     1     6     9
```

veklogic
This function applies different boolean operators to two vectors. It's a
wrapper for the functions a_and_b, a_or_b, a_xor_b, a_not_b

indexlogic
This function applies different boolean operators to two index vectors. This
routine is much faster then VekLogik but can only used with index vectors.

For some more routine please have a look at
 http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_lib_intro. html

regards

Reimar

> I would like to design a function which returns the indices of all the
> elements of A which appear in B.
>
> i.e.
>
> C=get_match(A,B)
>
> should return
>
> C=[2,3,4,6]
>
> The simplest answer (I believe) is to loop through B and use the where
> command. I just wonder if there is a way to do this without useing the
> loop, as (in reality) the length of B may be very large.
>
> I suppose another possibility is to use the histogram command with
> reverse_indices set. But I think this would still require me to use a
> loop. Although it may be faster since I would only have to call histogram
> once. Any thoughts?
>
> Thanks,
> Eli

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