Subject: Re: Ordered index array
Posted by David Fanning on Thu, 08 Sep 2005 13:02:36 GMT
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Paolo Grigis writes:

> But this will fail if 'a' has more elements than the number of
> its different values, for instance a=[3,3,1,2,3,2,2,1,2,3].
>
> One could try this:
>
> PRO test
>
> a=[3,3,1,2,3,2,2,1,2,3]
>
> b=a
> c=intarr(n_elements(a))
>
> h=histogram(a,min=1,reverse_ind=ri)
>
> done=0
> rank=1
> WHILE NOT done DO BEGIN
> actual_value=b[0]
> ind_actual_value=ri[ri[actual_value-1]:ri[actual_value]-1]
> c[ind_actual_value]=rank
> rank=rank+1
> indremove=where(b NE actual_value,count)
> IF count GT 0 THEN b=b[indremove] ELSE done=1
> ENDWHILE
>
> print,a
> print,c
>
> END
>
>
> but it will get inefficient as the numbers of different values
> in 'a' grows, as the code in the loop get called more and more
> times...

Humm. Maybe I'm missing something (I haven't had my coffee yet),
but couldn't this be solved with the original code I wrote by
changing these two lines:

```
; Create index array and output array.
b = Indgen(N_Elements(a))+ 1
c = Intarr(N_Elements(a))
```

To these:

```
; Create index array and output array.
b = Indgen(N_Elements(a) > N_Elements(h)) + 1
c = Intarr(N_Elements(a) > N_Elements(h))
```

Then,

```
IDL> a=[3,3,1,2,3,2,2,1,2,3]
IDL> Print, a
   1  1  3  4  1  4  4  3  4  1
```

Cheers,

David

--
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