Subject: Re: Ordered index array
Posted by David Fanning on Wed, 07 Sep 2005 17:01:57 GMT
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Emmanuel Christophe writes:

> I would like to change the values on an array according to the order
> they appear. Following this example:
>
> starting with the array
> [3,6,2,1,2,8,1,1]
> I would like to get
> [1,2,3,4,3,5,4,4]
>
> 3 being the first value seen it is affected to 1
> 6 being the second, affected to 2
> ...
>
> I guess this process is similar to lookup tables, or color tables. As I
> would like to process quite big arrays (>60000 long elements), i'm
> looking for an efficient function. I don't really know what to look for
> in IDL help to find something which could help.

How about this:

```
PRO TEST
a = [3,6,2,1,2,7,1,1]
h = Histogram(a, Reverse_Indices=ri, Min=0)
b = Indgen(N_Elements(h)) + 1
c = Intarr(N_Elements(h))
FOR j=0,N_Elements(h)-1 DO BEGIN
   IF ri[j+1] NE ri[j] THEN $
     c[ri[ri[j]:ri[j+1]-1]] = Min(b[ri[ri[j]:ri[j+1]-1]])
ENDFOR
Print, c
END
```

      1   2   3   4   3   6   4   4

Note that your original example is wrong. :-)

Cheers,

David

--
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