
Subject: Re: Ordered index array

Posted by [Emmanuel Christophe](#) on Thu, 08 Sep 2005 08:48:08 GMT

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Sorry, my example was confusing:

if the input is

[2,2,2,2,2,2,2,2,5,8]

I would like an output like

[1,1,1,1,1,1,1,1,1,2,3]

The property that should be verified is the n-th symbol of the output is either

- the same as one between 0 and (n-1)th position
- equal to $\max(\text{output}[0:n-1]) + 1$

and $\text{output}[0]=1$

I thought also about using the `reverse_indices` of the histogram function, but as it doesn't preserve the order, I'm not sure it would work.

Thanks,
Emmanuel

David Fanning a écrit :

> David Fanning writes:

```
>
>
>> 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. :-)
>
>
```

> Whoops! *I* didn't use the original example either (although
> yours is still wrong!).
>
> Here is a more complete solution, using the original data:
>
> PRO TEST
> a = [3,6,2,1,2,8,1,1]
> 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[0:N_Elements(a)-1]
> END
>
> Cheers,
>
> David
>
>
