Subject: Re: Ordered index array
Posted by Paolo Grigis on Thu, 08 Sep 2005 10:03:07 GMT
View Forum Message <> Reply to Message

Emmanuel Christophe wrote:
> Thanks Paolo,
> Your function does exactly what I want, but my problem is precisely that
> I need to do it on huge array (300 000 elements at least), that why i'm
> looking for a more 'IDL' way to do it :)
The problem is not in the number of *elements* of a, but
in the number of *different values* that a can take...
but yes, if this is large, you should not use that routine.

Paolo

>
> Emmanuel
>
>
>
>
>> 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...
>>
>> Ciao,
>> Paolo
>>
>>
>>> Cheers,
>>>
>>> David
>>>
>>>