Subject: Re: I would like to average the first n columns based on duplicate values of the n+1th column
Posted by Markus Schmassmann on Tue, 04 Oct 2016 10:32:46 GMT
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On 10/03/2016 11:05 PM, belkaraza@web.de wrote:
> Can Someone help me solve this problem in IDL:
> "I have a matrix with duplicate numbers in one of the columns. I
> would
> like to average the rows with duplicate numbers. For example, I have
> duplicate values in a matrix A in column 3:
> A =
> 1 2 1
> 4 4 2
> 5 4 2
> 4 5 2
> 5 5 3
> 10 3 3
>
>
> B =
> 1 2 1
> 4.3333 4.3333 2.0000
> 7.5000 4.0000 3.0000
>
> where each row is the average values of the duplicate rows of column 3.
>
> Can anyone help?"
>
> found here:
> http://stackoverflow.com/questions/15270019/i-would-like-to-average-the-first-n-columns-based-on-duplicate-values-of-the -n1

```
if isa(A,/integer) then begin
    h=histogram(A[2,*],reverse_indices=ri)
    idx=where(h ne 0,n)
    B=fltarr(3,n)
    for i=0,n-1 do begin
       if ri[idx[i]] eq ri[idx[i]+1]-1 then $
          B[0,i]=A[*,ri[ri[idx[i]]:ri[idx[i]+1]-1]] else $
          B[0,i]=mean(A[*,ri[ri[idx[i]]:ri[idx[i]+1]-1]],dim=2)
    endfor
endif else
    values=A[2,uniq(A[2,*],sort(A[2,*]))]
; if A[2,*] is already sorted,   A[2,uniq(A[2,*])]   is sufficient there
    n=n_elements(values)
    B=fltarr(3,n)
    for i=0,n-1 do begin
```

```
        w=where(A[2,*] eq values[i],cnt)
        if w cnt 1 then B[0,i]=A[*,where(A[2,*] eq values[i])] else $
            B[0,i]=mean(A[*,where(A[2,*] eq values[i])],dim=2,/nan)
    endfor
endelse
```

hope that does it, Markus
