
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[idx[i]]:ri[idx[i]+1]-1] else $
            B[0,i]=mean(A[*,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
