Subject: Re: remove duplicates WITHOUT sorting
Posted by rpertaub@gmail.com on Tue, 13 Feb 2007 15:18:42 GMT
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On Feb 12, 4:15 pm, JD Smith <jdsm...@as.arizona.edu> wrote:
> On Mon, 12 Feb 2007 09:04:45 -0800, rpert...@gmail.com wrote:
>> Hello All,
>> I have an array of 2xn which is a list of coordinates (x,y positions)
>> and I need to remove any duplicates in this array. Since they are x,y
>> coordinates I cannot really sort the array, hence cannot use the Uniq
>> function. Is there another way of doing this?
>
> It's easiest to recast as 1D. HIST_2D (or HIST_ND) does this for you, but
> it's easy to do yourself:
>
> index=x + (max(x)+1)*y
>
> and then using UNIQ on this list of indices should give you the row
> positions of unique coordinates. HISTOGRAM can work as well (either
> with HIST_ND, or by first constructing this index vector above), and
> it will be faster, but, as usual, will consume lots of memory (and
> potentially be very slow) if your coordinates are sparsely sprinkled over
> a large range of values (your current example is somewhat sparse, but not
> horrible). UNIQ, with its SORT based implementation, doesn't suffer from
> that issue.
>
> JD

Thank You All for responding.
I basically did sort in the end, but sorted the x coords and
corresponding y coords stayed with
its pair. Then did a shift to eliminate recurrences:

```
SortIndex=Sort(AllCoords[0,*])
for j=0,1 Do AllCoords[j,*] = AllCoords[j,sortindex]
Print,"Sorted All Cords is",AllCoords
print,' '


B=AllCoords - Shift(AllCoords,2)
print,' '
C=AllCoords[*,where(B[0,*] ge 0.5 or B[1,*] ge 0.6)]
csize=size(C,/dimensions)
print,'size c' ,csize[0],csize[1]
```