Subject: Re: remove duplicate elements from a multi-dimensional array efficiently in IDL
Posted by chenbo09@gmail.com on Sun, 03 May 2009 17:47:38 GMT
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On May 2, 7:57 pm, Jeremy Bailin <astroco...@gmail.com> wrote:
> On May 2, 8:47 pm, guillermo.castilla.castell...@gmail.com wrote:
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>
>> On May 1, 12:36 pm, Jeremy Bailin <astroco...@gmail.com> wrote:
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>>> On May 1, 1:47 pm, Jeremy Bailin <astroco...@gmail.com> wrote:
>
>>>> On May 1, 12:13 pm, "chenb...@gmail.com" <chenb...@gmail.com> wrote:
>
>>>> > Hello, everyone!
>
>>>> > Is there anyone knows a routine in IDL that be capable to remove
>>>> > duplicate elements from a multi-dimensional array efficiently? I 'm
>>>> > now working with huge arrays, and I have written one by myself, it
>>>> > works but is with low efficiency.
>
>>>> > example of my problem:
>>>> > the input array:
>>>> > 1,10,9,100,200
>>>> > 2,11,8,101,201
>>>> > 2,11,8,101,201
>>>> > 3,10,9,100,200
>>>> > 4,7,12,99,199
>>>> > 2,11,8,101,201
>
>>>> > goal:
>>>> > remove the duplicate elements with the same values for the second and
>>>> > the third column.
>
>>>> > expected output:
>>>> > 1,10,9,100,200
>>>> > 2,11,8,101,201
>>>> > 4,7,12,99,199
>
>>>> > Thanks for your help!
>
>>>> > Bo
>
>> If you don't have handy that ORD function Jeremy pointed out (I didn't
>> know of it), and assuming your array is of byte type, you can do the
>> following:

```
>
>>  input = [[1,10,9,100,200],[2,11,8,101,201],[2,11,8,101,201],$
>>          [3,10,9,100,200],[4,7,12,99,199],[2,11,8,101,201]]
>
>>  keep = Where(Histogram(1000L*input[1,*]+input[2,*], rev=r) GT 0)
>>  keep = r[r[keep]]
>>  print, input[*,keep[sort(keep)]]
>>        1      10       9     100     200
>>        2      11       8     101     201
>>        4       7      12      99     199
>
>>  Cheers
>
>>  Guillermo
>
>  You can find ord at:
>
>  http://web.astroconst.org/jbiu/jbiu-doc/math/ord.html
>
>  -Jeremy.
```

Jeremy,

Thanks for your kind and prompt help!
It took my own routine 18 hours to do the job. I have just plug the codes you kindly offered into my codes, I'll let you know how efficient your routine is. Thanks!

Bo