Subject: Re: Removing repeating array values
Posted by David Fanning on Tue, 28 Mar 2006 20:30:21 GMT

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Jonathan Wolfe writes:

- > Is there an easier way than a for loop to remove repeating values
- > within an array? For example, I have two arrays and am trying to match
- > the closest value from one with the other using a where() statement.
- > When the where statement is returned, I have multiple instances of the
- > same value; however, I just want to keep one of these. A for loop
- > works, but computing speed is slow, I'm running on an old 700MHz PIII.
- > Do you know of a faster way? Thanks for the help!

Removing elements from an array is tailor-made for the HISTOGRAM function. See the Histogram Tutorial for an example:

http://www.dfanning.com/tips/histogram_tutorial.html

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Removing repeating array values Posted by mchinand on Tue, 28 Mar 2006 20:40:26 GMT

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In article <1143577351.464281.41560@i39g2000cwa.googlegroups.com>, Jonathan Wolfe <vorticitywolfe@gmail.com> wrote:

- > Is there an easier way than a for loop to remove repeating values
- > within an array? For example, I have two arrays and am trying to match
- > the closest value from one with the other using a where() statement.
- > When the where statement is returned, I have multiple instances of the
- > same value; however, I just want to keep one of these. A for loop
- > works, but computing speed is slow, I'm running on an old 700MHz PIII.
- > Do you know of a faster way? Thanks for the help!

>

> Jon

See the UNIQ function. Your array has to be sorted or else you need to use the optional index parameter.

```
--Mike
```

Michael Chinander, PhD m-chinander@uchicago.edu Department of Radiology University of Chicago

Subject: Re: Removing repeating array values Posted by savoie on Tue, 28 Mar 2006 20:43:00 GMT View Forum Message <> Reply to Message

David Fanning <davidf@dfanning.com> writes:

```
> Jonathan Wolfe writes:
>
>> Is there an easier way than a for loop to remove repeating values
>> within an array? For example, I have two arrays and am trying to match
>> the closest value from one with the other using a where() statement.
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> an example:
    http://www.dfanning.com/tips/histogram_tutorial.html
>
> Cheers,
> David
```

I responded privately at first, but thought other people might want this too.

```
Is UNIQ what you're looking for?
from the manual...
; Create an array:
array = [1, 2, 1, 2, 3, 4, 5, 6, 6, 5]
; Variable B holds an array containing the sorted, unique values in
; array:
b = array[UNIQ(array, SORT(array))]
```

PRINT, b **IDL** prints 1 2 3 4 5 6 It might be faster than learning histogram:) Just a thought. Matt Matthew Savoie - Scientific Programmer National Snow and Ice Data Center (303) 735-0785 http://nsidc.org Subject: Re: Removing repeating array values Posted by vorticitywolfe on Tue, 28 Mar 2006 20:50:22 GMT View Forum Message <> Reply to Message Thanks guys! That worked! ~Jon Subject: Re: Removing repeating array values Posted by David Fanning on Tue, 28 Mar 2006 21:02:06 GMT View Forum Message <> Reply to Message Matt Savoie writes: > It might be faster than learning histogram :) Faster, but less useful in the long run. :-) Cheers, David David Fanning, Ph.D. Fanning Software Consulting, Inc. Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Removing repeating array values Posted by mmeron on Tue, 28 Mar 2006 21:26:55 GMT

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In article <MPG.1e934acb64c3cce6989be0@news.frii.com>, David Fanning <davidf@dfanning.com> writes:

> Jonathan Wolfe writes:

>

- >> Is there an easier way than a for loop to remove repeating values
- >> within an array? For example, I have two arrays and am trying to match
- >> the closest value from one with the other using a where() statement.
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>

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- > the HISTOGRAM function. See the Histogram Tutorial for
- > an example:

>

> http://www.dfanning.com/tips/histogram_tutorial.html

>

It sure is perfect for Histogram. For completeness, though, I've a function (named SORPURGE) in my library that'll do the same, using a single call to WHERE.

Mati Meron | "When you argue with a fool, meron@cars.uchicago.edu | chances are he is doing just the same"