
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 [saveio](#) on Tue, 28 Mar 2006 20:43:00 GMT
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David Fanning <davidf@dfanning.com> writes:

> Jonathan Wolfe writes:
>
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>> 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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>
> 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
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Thanks guys! That worked!

~Jon

Subject: Re: Removing repeating array values
Posted by [David Fanning](#) on Tue, 28 Mar 2006 21:02:06 GMT
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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:

>

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>> 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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> the HISTOGRAM function. See the Histogram Tutorial for
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>

> 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"
