Subject: list concatenation
Posted by greg.addr on Fri, 26 Feb 2016 15:00:36 GMT
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I've accumulated a list of variable length arrays, e.g.

IDL> diam
[
  [0.13860799, 0.035755500, 0.037822500],
  [0.17081800],
  [0.28975499, 0.050387200, 0.053300999],
  [2.6970799, 1.3410200, 0.60130101],
  [0.64086902, 0.61904001, 0.66626000, 0.27435899],
  [0.86649197, 0.71003902],
  [0.83967102, 0.47101700],
  [0.18503401],

...

Is there a nice way to flatten this into a 1D array?

cheers,
Greg

Subject: Re: list concatenation
Posted by Paul Van Delst[1] on Fri, 26 Feb 2016 16:04:51 GMT
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http://www.harrisgeospatial.com/docs/LIST.html#ToArrayMethod

?

On 02/26/16 10:00, greg.addr@googlemail.com wrote:
>
> I've accumulated a list of variable length arrays, e.g.
>
> IDL> diam
> [
> [0.13860799, 0.035755500, 0.037822500],
> [0.17081800],
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> [0.64086902, 0.61904001, 0.66626000, 0.27435899],
> [0.86649197, 0.71003902],
> [0.83967102, 0.47101700],
> [0.18503401],

>
> ...
>
>
> Is there a nice way to flatten this into a 1D array?
>
> cheers,
> Greg
>

Subject: Re: list concatenation
Posted by Paul Van Delst[1] on Fri, 26 Feb 2016 16:08:32 GMT
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I was curious as to how this works (never used the ToArray method):

```
IDL> l = LIST(Findgen(3), Findgen(12), Findgen(5))
IDL> l
[
    [0.0000000, 1.0000000, 2.0000000],
    [0.0000000, 1.0000000, 2.0000000, 3.0000000, 4.0000000, 5.0000000,
     6.0000000, 7.0000000, 8.0000000, 9.0000000, 10.000000, 11.000000],
    [0.0000000, 1.0000000, 2.0000000, 3.0000000, 4.0000000]
]
IDL> help, l.toarray()
% LIST::TOARRAY: Unable to concatenate arrays: Element 1
% Execution halted at: $MAIN$
```

Nup. How about the DIMENSION keyword?

```
IDL> help, l.toarray(dimension=1)
<Expression>    FLOAT     = Array[20]
```

Huh. Cool.

On 02/26/16 11:04, Paul van Delst wrote:
> http://www.harrisgeospatial.com/docs/LIST.html#ToArrayMethod
>
> ?
>
> On 02/26/16 10:00, greg.addr@googlemail.com wrote:
>>
>> I've accumulated a list of variable length arrays, e.g.
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>> IDL> diam

>> [
>> [0.13860799, 0.035755500, 0.037822500],
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>>
>> ...
>>
>>
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>>
>> cheers,
>> Greg
>>

Subject: Re: list concatenation
Posted by greg.addr on Fri, 26 Feb 2016 16:29:54 GMT
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On Friday, February 26, 2016 at 5:08:36 PM UTC+1, Paul van Delst wrote:
> I was curious as to how this works (never used the ToArray method):
>
> IDL> l = LIST(Findgen(3), Findgen(12), Findgen(5))
> IDL> l
> [
> [0.0000000, 1.0000000, 2.0000000],
> [0.0000000, 1.0000000, 2.0000000, 3.0000000, 4.0000000, 5.0000000,
> 6.0000000, 7.0000000, 8.0000000, 9.0000000, 10.000000, 11.000000],
> [0.0000000, 1.0000000, 2.0000000, 3.0000000, 4.0000000]
>]
> IDL> help, l.toarray()
> % LIST::TOARRAY: Unable to concatenate arrays: Element 1
> % Execution halted at: $MAIN$
>
>
> Nup. How about the DIMENSION keyword?
>
> IDL> help, l.toarray(dimension=1)
> <Expression> FLOAT = Array[20]
>
> Huh. Cool.
>
>

> On 02/26/16 11:04, Paul van Delst wrote:
>> http://www.harrisgeospatial.com/docs/LIST.html#ToArrayMethod
>>
>> ?
>>
>> On 02/26/16 10:00, wrote:
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>>> [0.86649197, 0.71003902],
>>> [0.83967102, 0.47101700],
>>> [0.18503401],
>>>
>>> ...
>>>
>>>
>>> Is there a nice way to flatten this into a 1D array?
>>>
>>> cheers,
>>> Greg
>>>

Thanks, Paul - I should have seen that!
