
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],  
>   [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 16:08:32 GMT
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I was curious as to how this works (never used the ToArray method):

```
IDL> I = LIST(Findgen(3), Findgen(12), Findgen(5))
IDL> I
[
  [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, I.toArray()
% LIST::TOARRAY: Unable to concatenate arrays: Element 1
% Execution halted at: $MAIN$
```

Nup. How about the DIMENSION keyword?

```
IDL> help, I.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@gmail.com wrote:
>>
>> 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 [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:
>>>
>>> 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
>>>
```

Thanks, Paul - I should have seen that!
