
Subject: Re: Working with lists

Posted by [Helder Marchetto](#) on Mon, 03 Jun 2013 19:21:57 GMT

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On Monday, June 3, 2013 7:39:46 PM UTC+2, fgg wrote:

> Hello,
>
>
>
> I have a string array that looks like this (with the exception that the numbers actually vary from element to element):
>
>
>
>
> str = replicate('1000 1000.1515 400 40', 10)
>
>
>
>
> Is there a simple way to extract these numbers to a 4 by 10 array without using loops? I've tried the following, but it doesn't work:
>
>
>
>
> str = strssplit(str, /extract)
>
> array = str.ToArray(type='float')
>
>
>
>
> % LIST::TOARRAY: Unable to convert to type FLOAT: Element 7
>
> % Error occurred at: LIST::TOARRAY
>
>> % \$MAIN\$
>
>>
>> % Execution halted at: \$MAIN\$
>
>
>
>> What's the problem with this?
>
>
>
>> Thanks!

How about this:

IDL> str = strssplit(str, /extract)

```
IDL> str = replicate('1000 1000.1515 400 40', 10)
IDL> str = strsplt(str, /extract)
IDL> array = float(str.ToArray() )
IDL> help, array
ARRAY      FLOAT   = Array[10, 4]
IDL> print, array[*,0]
  1000.00    1000.00    1000.00    1000.00    1000.00    1000.00    1000.00    1000.00
  1000.00    1000.00
```

Cheers,
Helder

Subject: Re: Working with lists
Posted by [fgg](#) on Mon, 03 Jun 2013 21:09:06 GMT
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Different error, but still doesn't work here. Btw, I'm running IDL 8.0.1 on Windows 7.

```
str = replicate('1000 1000.1515 400 40', 10)
str = strsplt(str, /extract)
array = float(str.ToArray())

% LIST::TOARRAY: Unable to convert to type STRING: Element 7
% Error occurred at: LIST::TOARRAY
%           $MAIN$
% Execution halted at: $MAIN$
```

```
> How about this:
>
>
>
> IDL> str = strsplt(str, /extract)
>
> IDL> str = replicate('1000 1000.1515 400 40', 10)
>
> IDL> str = strsplt(str, /extract)
>
> IDL> array = float(str.ToArray() )
>
> IDL> help, array
>
> ARRAY      FLOAT   = Array[10, 4]
>
> IDL> print, array[*,0]
>
```

```
>    1000.00   1000.00   1000.00   1000.00   1000.00   1000.00   1000.00   1000.00   1000.00  
>    1000.00   1000.00  
>  
>  
>  
> Cheers,  
>  
> Helder
```

Subject: Re: Working with lists

Posted by [Craig Markwardt](#) on Tue, 04 Jun 2013 04:18:05 GMT

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On Monday, June 3, 2013 1:39:46 PM UTC-4, fgg wrote:

> I have a string array that looks like this (with the exception that the numbers actually vary from element to element):
>
> str = replicate('1000 1000.1515 400 40', 10)
>
> Is there a simple way to extract these numbers to a 4 by 10 array without using loops? I've tried the following, but it doesn't work:
>
> str = strsplit(str, /extract)
> array = str.ToArray(type='float')

Umm, is there any reason that this doesn't work?

```
ff = fltarr(4,10)  
reads, str, ff
```

I don't use `ToArray()`, so I don't really understand how it works. Maybe it's getting confused, but plain `READS` does not get confused.

Craig

Subject: Re: Working with lists

Posted by [SonicKenking](#) on Tue, 04 Jun 2013 04:23:46 GMT

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On Tuesday, June 4, 2013 7:09:06 AM UTC+10, fgg wrote:

> Different error, but still doesn't work here. Btw, I'm running IDL 8.0.1 on Windows 7.
>
>
>
> str = replicate('1000 1000.1515 400 40', 10)
>


```
>> ARRAY      FLOAT   = Array[10, 4]
>
>>
>
>> IDL> print, array[*,0]
>
>>
>
>>    1000.00   1000.00   1000.00   1000.00   1000.00   1000.00   1000.00
1000.00   1000.00   1000.00
>
>>
>
>>
>
>>
>
>>
>
>>
>
>> Cheers,
>
>>
>
>> Helder
```

The error is probably due to your version of IDL.

Anyway, here is a solution without 8.0 features:

```
s = '1000 1000.1515 400 40'
array = rebin(float(strsplit(s, /extract)), 4, 10)
```

Subject: Re: Working with lists

Posted by [fgg](#) on Fri, 07 Jun 2013 17:33:36 GMT

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strsplit returns a list in this case, and if I do what you suggested below I get:

% READS: Object reference expression not allowed in this context: STR.

```
> Umm, is there any reason that this doesn't work?
>
> ff = filtarr(4,10)
>
> reads, str, ff
>
>
>
> I don't use ToArray(), so I don't really understand how it works. Maybe it's getting confused, but
```

plain READS does not get confused.

>
>
>
> Craig

Subject: Re: Working with lists

Posted by [fgg](#) on Fri, 07 Jun 2013 17:40:35 GMT

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Yes, this works for a single line '1000 1000.1515 400 40', but my dataset is actually composed by a bunch of lines like this, where the numbers actually vary. So you have something like replicate('1000 1000.1515 400 40', 10), but where the lines are not really replicates.

Thanks!

>
> The error is probably due to your version of IDL.
>
> Anyway, here is a solution without 8.0 features:
>
>
>
>
> s = '1000 1000.1515 400 40'
>
> array = rebin(float(strsplit(s, /extract)), 4, 10)
