
Subject: Re: How to eliminate trailing zeros in a string?
Posted by [David Fanning](#) on Fri, 24 Jan 2003 22:42:54 GMT
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K Banerjee (kbanerjee@ucwphilly.rr.com) writes:

> Say I have the string "20.304000". How can I eliminate the last 3
> zeros?

Oh, man, this is going to get me banished from the IDL
Expert Programmers Association, but what about this
little function:

```
.*****  
,  
FUNCTION StripZeros, str  
  
IF N_Elements(str) EQ 0 THEN $  
    theString = '20.304000' ELSE $  
    theString = str  
  
char = (Reverse(Byte(theString)))[0]  
IF char NE 48 THEN RETURN, theString ELSE BEGIN  
    WHILE char EQ 48 DO BEGIN  
        theString = StrMid(theString, 0, StrLen(theString)-1)  
        char = (Reverse(Byte(theString)))[0]  
    ENDWHILE  
ENDELSE  
RETURN, theString  
END  
.*****  
,
```

Run it like this:

```
IDL> Print, StripZeros('20.304000')  
20.304
```

I'm not claiming elegant here, but it took me 3 minutes, tops!
I'm **sure** I could make it shorter if I had more time. :-)

Cheers,

David

--

David W. Fanning, Ph.D.
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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: How to eliminate trailing zeros in a string?
Posted by [David Fanning](#) on Fri, 24 Jan 2003 22:56:23 GMT
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David Fanning (david@dfanning.com) writes:

```
> K Banerjee (kbanerjee@ucwphilly.rr.com) writes:
>
>> Say I have the string "20.304000". How can I eliminate the last 3
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>
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> *****
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>     char = (Reverse(Byte(theString)))[0]
>   ENDWHILE
> ENDELSE
> RETURN, theString
> END
> *****
>
> Run it like this:
>
> IDL> Print, StripZeros('20.304000')
>   20.304
>
> I'm not claiming elegant here, but it took me 3 minutes, tops!
> I'm *sure* I could make it shorter if I had more time. :-)
```

Alright, I've thought about it a little bit. How about this:

```
IDL> str = '20.304000'
IDL> str = String(str, Format='(F6.3)')
```

IDL> Print, str
20.304

Cheers,

David

--

David W. Fanning, Ph.D.
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Subject: Re: How to eliminate trailing zeros in a string?
Posted by [K. Bowman](#) on Fri, 24 Jan 2003 22:58:10 GMT
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In article <FciY9.100408\$eB1.3827522@twister.southeast.rr.com>,
K Banerjee <kbanerjee@ucwphilly.rr.com> wrote:

> Say I have the string "20.304000". How can I eliminate the last 3
> zeros?

See STRMID (and possibly STRPOS, etc.).

Ken

Subject: Re: How to eliminate trailing zeros in a string?
Posted by [James Kuyper](#) on Fri, 24 Jan 2003 23:05:02 GMT
[View Forum Message](#) <> [Reply to Message](#)

David Fanning wrote:

>
> David Fanning (david@dfanning.com) writes:
>
>> K Banerjee (kbanerjee@ucwphilly.rr.com) writes:
>>
>>> Say I have the string "20.304000". How can I eliminate the last 3
>>> zeros?
>>
>> Oh, man, this is going to get me banished from the IDL
>> Expert Programmers Association, but what about this
>> little function:
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>> .*****

```

>> FUNCTION StripZeros, str
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>> IF N_Elements(str) EQ 0 THEN $
>>   theString = '20.304000' ELSE $
>>   theString = str
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>> char = (Reverse(Byte(theString)))[0]
>> IF char NE 48 THEN RETURN, theString ELSE BEGIN
>>   WHILE char EQ 48 DO BEGIN
>>     theString = StrMid(theString, 0, StrLen(theString)-1)
>>     char = (Reverse(Byte(theString)))[0]
>>   ENDWHILE
>> ENDELSE
>> RETURN, theString
>> END
>> ;*****
>>
>> Run it like this:
>>
>> IDL> Print, StripZeros('20.304000')
>>   20.304
>>
>> I'm not claiming elegant here, but it took me 3 minutes, tops!
>> I'm *sure* I could make it shorter if I had more time. :-)
>
> Alright, I've thought about it a little bit. How about this:
>
> IDL> str = '20.304000'
> IDL> str = String(str, Format='(F6.3)')
> IDL> Print, str
>   20.304

```

I'd assume from the title that he wants to remove ALL of the trailing zeros, no matter how many or how few they are.

Subject: Re: How to eliminate trailing zeros in a string?
 Posted by [David Fanning](#) on Fri, 24 Jan 2003 23:14:08 GMT
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James Kuyper (kuyper@saicmodis.com) writes:

```

> I'd assume from the title that he wants to remove ALL of the trailing
> zeros, no matter how many or how few they are.

```

Well, then, he can use the inelegant and slower solution. :-)

Cheers,

David

--

David W. Fanning, Ph.D.
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Subject: Re: How to eliminate trailing zeros in a string?
Posted by [marc schellens\[1\]](#) on Sat, 25 Jan 2003 11:59:25 GMT
[View Forum Message](#) <> [Reply to Message](#)

K Banerjee wrote:

> Folks,
>
> Say I have the string "20.304000". How can I eliminate the last 3
> zeros?
>
> Thanks.
>
> K. Banerjee
>

How about this one:

```
s=inputString  
b=byte(s)  
i=max(where(b ne 48))  
trim=string(b[0:i])
```

This won't work with multiple of 10 integers (when no decimal point is there).

BTW: Is there a specification, that the where function gives its result always in ascending order?

cheers,
marc

Subject: Re: How to eliminate trailing zeros in a string?
Posted by [Craig Markwardt](#) on Sat, 25 Jan 2003 18:35:56 GMT
[View Forum Message](#) <> [Reply to Message](#)

David Fanning <david@dfanning.com> writes:

```
>
> Alright, I've thought about it a little bit. How about this:
>
> IDL> str = '20.304000'
> IDL> str = String(str, Format='(F6.3)')
> IDL> Print, str
>    20.304
```

How about this variation on David's technique, but satisfies James's requirement of an arbitrary number of zeroes:

```
print, string(str, format='(G0)')
```

The "G0" format usually renders a number in its most compact form.

Craig

--

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
