
Subject: Re: Format strings with comma separated lists

Posted by [davidf](#) on Mon, 10 May 1999 07:00:00 GMT

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William Daffer (vapuser@catspaw.jpl.nasa.gov) writes:

> Apparently, the short answer is you don't need to use format strings
> on input, provided, I guess, the data is homogeneous and with a
> constant number of columns(?); IDL understands that you don't want the
> comma.

Uh, this has been a feature of IDL since...well, since
version 1.0, I believe. ;-)

Cheers,

David

P.S. Ain't IDL grand!? Hardly a week goes by I don't
learn something new about it. :-)

--

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Format strings with comma separated lists

Posted by [Vapuser](#) on Mon, 10 May 1999 07:00:00 GMT

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Well, am I'm surprised!

Just for a lark, I tried this

```
IDL> openw,1,'/tmp/delme.junk'
IDL> v=findgen(20)
IDL> printf,1,v,format='(4(f5.2,;,""))'
(NB, this comes out looking like
 0.00, 1.00, 2.00, 3.00,
 4.00, 5.00, 6.00, 7.00,
 8.00, 9.00,10.00,11.00,
12.00,13.00,14.00,15.00,
16.00,17.00,18.00,19.00 )
```

```
IDL> close,1
```

```
IDL> openr,1,'/tmp/delme.junk'
IDL> v[*]=0
IDL> print,minmax(v)
      0.00000    0.00000
IDL> v=reform(v,4,5)
IDL> help,v
V          FLOAT    = Array[4, 5]
IDL> readf,1,v
IDL> print,v
      0.00000    1.00000    2.00000    3.00000
      4.00000    5.00000    6.00000    7.00000
      8.00000    9.00000   10.0000    11.0000
     12.0000   13.0000   14.0000   15.0000
     16.0000   17.0000   18.0000   19.0000
; Or, you can read it into a vector
```

```
IDL> v=fltarr(20)
IDL> point_lun,1,0
IDL> readf,1,v
IDL> print,v
      0.00000    1.00000    2.00000    3.00000    4.00000    5.00000
      6.00000    7.00000    8.00000    9.00000   10.0000   11.0000
     12.0000   13.0000   14.0000   15.0000   16.0000   17.0000
     18.0000   19.0000
IDL>
```

Apparently, the short answer is you don't need to use format strings on input, provided, I guess, the data is homogeneous and with a constant number of columns(?); IDL understands that you don't want the comma.

You can even read the data if there isn't a constant number of columns. I edited the file so that it looked like;

```
0.00, 1.00, 2.00,
4.00, 5.00, 6.00, 7.00,
8.00, 9.00,10.00,11.00,
12.00,13.00,14.00,15.00,
16.00,17.00,18.00,19.00
```

and read it with;

```
IDL> v=fltarr(19)
IDL> readf,1,v
IDL> print,v
      0.00000    1.00000    2.00000    4.00000    5.00000    6.00000
      7.00000    8.00000    9.00000   10.0000   11.0000   12.0000
```

13.0000 14.0000 15.0000 16.0000 17.0000 18.0000
19.0000

IDL>

I was going to suggest a combination of string reads and
STR_SEP. Doesn't look like you need it.

(By the way, this is a

```
IDL> print,!version  
{ mipseb IRIX unix 5.1.1 Jul 20 1998} system  
)
```

William

philaldis@geocities.com (Phil Aldis) writes:

```
> I hoping that someone else understands format strings better than I  
> do, because I can't get them to work at all. I was wondering if anyone  
> knew how to read a comma delimited list using format strings, such as  
>  
> Readf, lun, variable, FORMAT='(n(F6.6, :, ","))'  
>  
> ...this is the way I would think that you should do it but this just  
> tells me that end of input record encountered.  
>  
> Does anyone know how to do it?#  
>  
> Cheers,  
> Phil Aldis
```

--

William Daffer: 818-354-0161: vapuser@catspaw.jpl.nasa.gov

Subject: Re: Format strings with comma separated lists
Posted by [gurman](#) on Mon, 10 May 1999 07:00:00 GMT
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In article <3736bb88.14638556@146.80.9.44>, philaldis@geocities.com wrote:

```
> I hoping that someone else understands format strings better than I  
> do, because I can't get them to work at all. I was wondering if anyone  
> knew how to read a comma delimited list using format strings, such as  
>  
> Readf, lun, variable, FORMAT='(n(F6.6, :, ","))'  
>
```

> ...this is the way I would think that you should do it but this just
> tells me that end of input record encountered.
>
> Does anyone know how to do it?#
>
> Cheers,
> Phil Aldis

Phil -

I believe this takes someone old enough to have learned programming first in FORTRAN....

For formatted reads, you basically want to include only variable descriptors and spaces (nX), so the colon and "," are counterproductive.

Have you tried something of the form:

IDL> READF, lun, variable, FORMAT = '\$(n(f6.6, 2x))

That is, you just want to skip the commas and read the floating-point variables.

Hope this is what you're looking for.

Joe Gurman

--

Joseph B. Gurman / NASA Goddard Space Flight Center / Solar Physics Branch /
Greenbelt MD 20771 / work: gurman@gsfc.nasa.gov /other: gurman@ari.net

Government employees are still not allowed to hold opinions while at work,
so any opinions expressed herein must be someone else's.

Subject: Re: Format strings with comma separated lists
Posted by [Martin Schultz](#) on Tue, 11 May 1999 07:00:00 GMT
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Vapuser wrote:

>
> Well, am I'm surprised!
>
> [...]
> Apparently, the short answer is you don't need to use format strings
> on input, provided, I guess, the data is homogeneous and with a
> constant number of columns(?); IDL understands that you don't want the
> comma.

23.4 12.2 12.1 10.0
56.4 98.4 103.2 143.9
200.2 232.8 165.1 99.7

Also: format strings are probably the easiest way to (safely) convert a file that is written in e.g. 60 lines with 8 numbers per line to an array of (40,12) [it's just one statement!]

puhuu. didn't know that i am that old - i know something about format !

—

|||||||\\------//|/|
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