
Subject: Re: Printf and line breaks
Posted by [s007amf](#) on Fri, 19 Jan 2001 20:04:08 GMT
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David Fanning (davidf@dfanning.com) wrote:

: ALAN FRAZIER (s007amf@news.wright.edu) writes:

: > Sorry to bother everyone with another question. But, I am just at the
: > beginning of the enduring process of learning IDL.

: Yeah, you and me, both. :-)

:

: > My current problem is with printf. I am trying to create a text output
: > file that can be easily imported into a spreadsheet. From what I can
: > tell, printf automatically line wraps after 80 or so characters. For my
: > output, I want printf to print everything on the same line. I am
: > wondering if anyone knows how to do this or if this is even possible?

: When you open the file for writing, set the WIDTH keyword to
: as wide a line as you need. 80 columns is the default
: for historical reasons. (Are you old enough to remember
: punch cards?)

: Cheers,

: David

: --

: David Fanning, Ph.D.

: Fanning Software Consulting

: Phone: 970-221-0438 E-Mail: davidf@dfanning.com

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

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

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Alan

Subject: Re: Printf and line breaks
Posted by [Pavel A. Romashkin](#) on Fri, 19 Jan 2001 21:43:26 GMT
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Is it my news reader or what? I have David's reply first in the thread,
then the question, then yet the same question again and David's reply
quoted. I am lost. I need to go home and have a beer :-(

Pavel

David Fanning wrote:

>
> ALAN FRAZIER (s007amf@news.wright.edu) writes:
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>> beginning of the enduring process of learning IDL.
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> Yeah, you and me, both. :-)
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> as wide a line as you need. 80 columns is the default
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> punch cards?)
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> Cheers,
>
> David

Subject: Re: Printf and line breaks

Posted by [davidf](#) on Fri, 19 Jan 2001 23:14:32 GMT

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Pavel A. Romashkin (pavel.romashkin@noaa.gov) writes:

> Is it my news reader or what? I have David's reply first in the thread,
> then the question, then yet the same question again and David's reply
> quoted. I am lost. I need to go home and have a beer :-(

Apparently, his newsreader broke (private communication).

But he reports that he is WAY too young to remember punch cards, although he vaguely remembers a couple of stories about them told by his grandfather.

You're right. It's time for a beer. :-)

Cheers,

David

--

David Fanning, Ph.D.

Subject: Re: Printf and line breaks
Posted by [Med Bennett](#) on Sat, 20 Jan 2001 16:33:57 GMT
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Sure. You just need to add a format statement, like

```
printf, fileptr, val1, val2, val3, val4, val5, val6, format='(6f8.1)'
```

or whatever format you want the numbers to be in.

ALAN FRAZIER wrote:

- > Sorry to bother everyone again. I am just beginning my enduring journey of
- > learning IDL and keep running into obstacles.
- >
- > My current problem is with printf. I am trying to create a text output
- > file that can be imported into a spreadsheet. My problem is that printf is
- > automatically line wrapping. For example:
- >
- > printf, fileptr, val1, val2, val3, val4, val5, val6,
- >
- > is producing output where val1, val2, val3, and val4 are on a single line.
- > But, val5 and val6 are placed on the following line. NOTE: I am actually
- > trying to print 10 different floats on the same line.
- >
- > I did think about converting all the values into one long string and
- > printing that string. But, this issue was still a problem.
- >
- > Anyone have any ideas about how to fix this? Is a solution even possible?
- >
- > Thanks,
- >
- > Alan

Subject: Re: Printf and line breaks
Posted by [T Bowers](#) on Mon, 22 Jan 2001 14:49:52 GMT
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Hey Alan, try this. This function will write an array to a text file
as it is formatted in memory. In your case, you want 10 floats on

1 line so:

```
//create your array to have same format as you want written to the file
dataArray = findgen(10)
```

```
//write it to a text file
openw, outFile, "out.txt", /get_lun
retCode = tbFWriteTData(outFile, dataArray, SEP="TAB")
close, outFile
```

Now they'll all write to a single, tab-separated line.
If you reformed the array to a [2,5] array, they'd print
out that way instead: 2 columns of 5 rows.

```
dataArray= reform(dataArray,2,5)
openw, outFile, "out.txt", /get_lun
retCode = tbFWriteTData(outFile, dataArray, SEP='2A'xb)
close, outFile
```

This way, the data was asterisk (*) separated because I specified
the sep to be 2A hexadecimal, the ascii code for *. It'll write as:

```
0.000000*1.00000
2.00000*3.00000
4.00000*5.00000
6.00000*7.00000
8.00000*9.00000
```

WARNING: This was written a while back when I 1st started using
IDL. I've never had any problems with it and use it alot but no
guarantees! And no laughing at my sloppy/inefficient coding!!;)

good luck,
todd bowers

```
----cut here----
;/////////////////////////////////
function tbFWriteTData, outFile, data, SEP=sep
;Fn to write data to tab (by default) delimited text files so the data is
; formatted as the array is in memory.
; Eg, if arr = fltarr(100,5), then tbFWriteTData(outFile, dataArray,
SEP="TAB")
; will write the data to file in 5 rows of 100 tab separated values.
; If arr is a string, it'll write it out as is, so note that if you have a
; string with spaces between character values and you want this to be
output
; as tab seperated values, then YOU should str_sep 1st to get it to an
```

array.

; NOTE: only 1D (including strings, which for some reason are categorized as 0

; dimensional (i.e. scalar) data) and 2D arrays supported.

;9/24/98 Todd Bowers

;//ASCII values for some common separators

CRLF = string('0D'xb) + string('0A'xb)

TAB = string('09'xb)

SPACE = string('20'xb)

if n_elements(sep) EQ 0 then \$;defaults to TAB

SEPARATOR = TAB \$

else if (strucase(sep) EQ "TAB" OR strucase(sep[0]) EQ "T") then \$

SEPARATOR = TAB \$

else if (strucase(sep) EQ "SPACE" OR strucase(sep[0]) EQ "S") then \$

SEPARATOR = SPACE \$

else if (strucase(sep) EQ "CRLF") then \$

SEPARATOR = CRLF \$

else \$;//or U can pass the ASCII value of the sep yourself! Any will do.

SEPARATOR = string(sep)

sizeData = size(data)

numDims = sizeData[0]

if numDims EQ 0 then begin

;//numDims = 0? .See if it's a string...

;// (BTW, shouldn't a string be a 1 dim array?)

str = "" & sz_str = size(str) & STRINGTYPE = sz_str[1]

if sizeData[1] EQ STRINGTYPE then begin

;data = str_sep(data," ",/TRIM)

numCols = n_elements(data)

numRows = 1

endif \$

;//Not a string? Then must be a scalar w/ 1 row 'n 1 col

else begin

numCols = 1

numRows = 1

endelse

endif \$

;//Ok, not a string or scalar, see if 1D row array (string or numeric)

else if numDims EQ 1 then begin

numCols = sizeData[1]

numRows = 1

endif \$

;//Must be a 2D array then.

else begin

numCols = sizeData[1]

```

    numRows = sizeData[2]
endelse

; //Go ahead and convert data to char's so I don't do it for every write
below...
stringData = strtrim(string(data[*,*]),2)

for j = 0, (numRows - 1) do begin
    for i = 0, (numCols - 1) do begin
        writeu, outFile, (stringData[i,j] + SEPERATOR)
    endfor
    if SEPERATOR NE CRLF then begin
        point_lun, -outFile, fpos
        point_lun, outFile, (fpos - 1)
        writeu, outFile, CRLF
    endif
endfor

return, 1
end;function tbFWriteTData
; ///////////////////////////////////////////////////
----cut here----

```

"ALAN FRAZIER" <s007amf@news.wright.edu> wrote in message
news:<94a5ur\$qsfs\$1@mercury.wright.edu>...

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> Alan
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Subject: Re: Printf and line breaks

Posted by [Jason P. Meyers](#) on Mon, 22 Jan 2001 16:02:50 GMT

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David Fanning wrote:

> But he reports that he is WAY too young to remember
> punch cards, although he vaguely remembers a couple
> of stories about them told by his grandfather.
>
> You're right. It's time for a beer. :-)
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> Cheers,
>
> David
>

I'll drink to that!, While I have heard of punch cards but only used them as cheap scrap paper, I was a bit surprised when I saw the first computer I used, a Commodore 64, in the Smithsonian!

Jason Meyers
PhD Student, Center for Imaging Science
Rochester Institute of Technology
jpm7934@rit.edu
