Subject: Re: Printf and line breaks Posted by s007amf on Fri, 19 Jan 2001 20:04:08 GMT View Forum Message <> Reply to Message 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

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: > >> 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

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.

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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, filetpr, 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, filetpr, 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 seperators
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
 SEPERATOR = TAB $
else if (strupcase(sep) EQ "TAB" OR strupcase(sep[0]) EQ "T") then $
 SEPERATOR = TAB $
else if (strupcase(sep) EQ "SPACE" OR strupcase(sep[0]) EQ "S") then $
 SEPERATOR = SPACE $
else if (strupcase(sep) EQ "CRLF") then $
 SEPERATOR = CRLF $
else $ ://or U can pass the ASCII value of the sep yourself! Any will do.
 SEPERATOR = 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,i] + 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$qsf$1@mercury.wright.edu>...
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of
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> My current problem is with printf. I am trying to create a text
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possible?
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>
Thanks,
>
Alan
```

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. :-)
- > 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