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

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.
- ; Eq, if arr = fltarr(100,5), then tbFWriteTData(outFile, dataArray,

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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
; 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
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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$qsf$1@mercury.wright.edu>...
> 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
> 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
> But, val5 and val6 are placed on the following line. NOTE: I am
actually
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> 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
> Alan
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