
Subject: Displaying loop-index (was: Re [Q] illegal character ?)

Posted by [knipp](#) on Fri, 12 Aug 1994 12:01:35 GMT

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IDL. Version 3.1.1 (sunos sparc)

Hi

Two or three years ago I wanted to keep track of the index in a loop, i.e. displaying the actual index in the loop. Naturally I wanted just one line as output overwriting that line again and again.

I came up with a solution using "\x08" which I had to change to `string(8b)` about a year ago.

The discussion in this group about "[Q] illegal character" gave me -finally :-)- the idea to use `string(13b)` instead of `string(8b)`.

So now I have two routines for the same task (I'll append them at the end - they're just a couple of lines long). I timed them against each other:

n_lines	n'th line	TIME 8b	TIME 13b	ratio
100	1	0.96499991	0.59800005	1.6137121
1000	1	9.7730000	5.4520000	1.7925532
10000	1	97.016000	55.228000	1.7566452
100	50	0.038999915	0.021000028	1.8571364
1000	50	0.22299993	0.21700001	1.0276494
10000	50	2.3700000	2.1220001	1.1168708

with `n_lines`: number of loops

`n'th line`: display every `n'th` loop-index

TIME: in seconds

ratio: $(\text{TIME } 8b) / (\text{TIME } 13b)$

As you can see using `string(13b)` seems to be faster.

If anyone of you has ideas to speed them up please inform me.

Karlheinz Knipp


```

; -----
; make it

ll = l+1

if (ll mod nl) eq 0 then begin

    bspc = string(8b) + string(8b) + string(8b) + string(8b) + string(8b) + $
    string(8b) + string(8b) + string(8b) + string(8b) + string(8b) + $
    string(8b) + string(8b) + string(8b) + string(8b) + string(8b) + $
    string(8b) + string(8b) + string(8b) + string(8b) + string(8b) + $
    string(8b) ; + string(8b) + string(8b) + string(8b) + string(8b)

    if n_elements(maxl) eq 0 $
    then smax = ' ' $
    else smax = ' / ' + string(format='(i8)',maxl+1l)

    print, format='($, i10, a, a)', ll, smax, bspc

endif

; -----
; return & end

return
end

;+
pro s_line, line, dummy, eline=eline, maxl=maxl, text=text

; shows actual line in loop
; -----
; START OF DESCRIPTION
;
; subroutine      IPI, U Hannover 08'94
;                  08'94:
;
; METHOD:          shows actual line in loop
;                  usinf <cr> = string(13b)
;
; INPUT  PARAMETER: line      actual line
;                  dummy      dummy input for comp. with SHOW_LINE
;
; OUTPUT PARAMETER: none

```

```

;
; INPUT KEYWORDS : eline    every nth line to display info    [1]
;                 maxl     last line  !! STRING !!           ["]
;                 text     text to display    [' actual ... ']
;
; OUTPUT KEYWORDS : none
;
; EXAMPLE:
;
; for i=0,99 do s_line, i, eline=1, maxl='99', text = 'DEMO ...' & print
;
; END   OF DESCRIPTION
; -----
;-

; -----
; test input / no test for faster proc

; -----
; test keywords

if n_elements(eline) ne 1 then eline = 1
eline = 1 > eline

; -----
; do it

if (line mod eline) eq 0 then begin

    CR = string(13b)
    smax = "
    if n_elements(maxl) eq 1 then $
        if strtrim(maxl,2) ne " then $
            smax = ' / ' + strtrim(string(maxl),2)

    if n_elements(text) ne 1 then text = ' actual ... '
    text = string(text)

    print, format='(a,a,i,a,$)', CR, text, line, smax

endif

```

```
rtcode = 0
```

```
return
end
```

^^^^^^^^^^^^^^^^^^^^ SNAP ^^^