
Subject: Re: structure information

Posted by [Todd Clements](#) on Thu, 06 Sep 2001 21:05:23 GMT

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> Who can write this so that the print-out has
> the *names* of the fields listed, too?
>
> Let's see, my usual prize when my kids do something
> like this is a "hug and a kiss". But I've met a few
> of you Maybe a handshake and the user group's
> undying admiration.
>
> Deadline is Monday, Sept 10th, so work productivity
> doesn't push the world economy into a real recession.
>

Here's my entry!

Todd

```
; ----- Begin code -----
pro test
  a = {struct1, x: fltarr(512), y: fltarr(512)}
  b = {struct2, z: fltarr(512), q: {struct1}}
  c = {struct3, a: {struct2}, b: {struct1}}
  d = {struct4, w: {struct3}, y: 4}

  result = s_info( d )
  for i=0l, n_elements(result)-1 do print, result[i]
end

function s_info, struct, recurse
  if( size(struct, /type ) ne 8 ) then return, "

  if( n_elements( recurse ) eq 0 ) then recurse = 0

  help, struct, /structure, out=out

  structLocations = strpos( out, '->' )

  ntags = n_tags( struct )

  if( recurse gt 0 ) then $
    spaces = string(replicate(byte(' '),3*recurse)) else spaces=""

  outString = spaces + out[0]
```

```

for i=1, ntags do begin
  outString = [outString, spaces+out[i] ]
  if( structLocations[i] ne -1 ) then begin
    result = s_info(struct.(i-1), recurse+1)
    if( result[0] ne " ) then outString = [outString, result]
  endif
endif
endfor

return, outString
end ;; s_info
; ----- End code -----

```

Result of running test:

```

** Structure STRUCT4, 2 tags, length=10244:
W      STRUCT  -> STRUCT3 Array[1]
** Structure STRUCT3, 2 tags, length=10240:
A      STRUCT  -> STRUCT2 Array[1]
** Structure STRUCT2, 2 tags, length=6144:
Z      FLOAT   Array[512]
Q      STRUCT  -> STRUCT1 Array[1]
** Structure STRUCT1, 2 tags, length=4096:
X      FLOAT   Array[512]
Y      FLOAT   Array[512]
B      STRUCT  -> STRUCT1 Array[1]
** Structure STRUCT1, 2 tags, length=4096:
X      FLOAT   Array[512]
Y      FLOAT   Array[512]
Y      INT      4

```
