Subject: Re: recursive functions?
Posted by davidf on Thu, 31 Aug 2000 15:37:49 GMT
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Nando Iavarone (f.iavarone@acsys.it) writes:
>
> I don't remember well, but 5.3 would have a mechanism in compiling to
> avoid this.
> Is it true?

Forward_Function RecFun

As the first line in RecFun will do it. I have to
warn you, however, that with this line your test program
will run forever! You might want to give this some thought. :-)

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

Subject: recursive functions?
Posted by Nando Iavarone on Thu, 31 Aug 2000 15:48:30 GMT
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<!doctype html public "-//w3c//dtd html 4.0 transitional//en">
<html>
Hi all,

I wrote a recursive function, but something does not work.

The example reported is the skeleton of the function.
<p>In this version:
<p>

function recFun, var1, var2

print, var1, var2

err = recFun($

string(var1)+'.Prrrr', $

string(var2)+'.Prrrr')

return, 0

end;

<p>

function recFunTest, var1, var2

err = recFun($

string(var1)+'.Prrrr', $

string(var2)+'.Prrrr')

return, err

end;

<p>if the source file is recFun.pro,

IDL shows:
<p>ENVI> .compile recFun

% Compiled module: RECFUN.

% Compiled module: RECFUNTEST.

ENVI> err=recFunTest(12,15)

      12.Prrrr
15.Prrrr

% Variable is undefined: RECFUN.

% Execution halted at: RECFUN   &amp
;nbsp;   &amp ;nbsp;
5

  /home/nando/InPhase/procedureDiProva/recFun.pro

 %   ;

;   ;
RECFUNTEST   19

  /home/nando/InPhase/procedureDiProva/recFun.pro

 %   ;
;   ;
$MAIN$

ENVI>

<p>If the file is modified as:
<p>

function recFunTest, var1, var2
<p>

print, var1, var2

err = recFuntest($

string(var1)+'.Prrrr', $

string(var2)+'.Prrrr')

return, err

end;

<p>the recursive function works.
<p>Am I missing something in the first case?

Why it does not work?
<p>Thank you.
<pre>--
Nando Iavarone
Advanced Computer System - SPACE DIVISION
via Lazzaro Belli, 23
00040 Frascati - RM

Tel: +39-6-944091 (switchboard)
           9440968 (direct)
E-mail:
    f.iavarone@acsys.it
    FrdndVrn@altavista.net</pre>
 </html>

Subject: Re: recursive functions?
Posted by Nando Iavarone on Thu, 31 Aug 2000 16:08:00 GMT
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<!doctype html public "-//w3c//dtd html 4.0 transitional//en">
<html>
Nando Iavarone wrote:
<blockquote TYPE=CITE>ENVI> .compile recFun

% Compiled module: RECFUN.

% Compiled module: RECFUNTEST.

ENVI> err=recFunTest(12,15)

      12.Prrrr
15.Prrrr

% Variable is undefined: RECFUN.

% Execution halted at: RECFUN   &amp
;nbsp;   &amp ;nbsp;
5

  /home/nando/InPhase/procedureDiProva/recFun.pro

 %   ;
;   ;
 RECFUNTEST   19

  /home/nando/InPhase/procedureDiProva/recFun.pro

 %   ;
;   ;
$MAIN$

ENVI>

 </blockquote>
it seems that the first time IDL 'compile' recFun function,

it consider recFun (in the code it is a function) a variable and on
run it does not find it.

if I recompile the source, recFun is now in the table of the functions
and it works.

as a workaround I compile the source twice and it works, but I don't
like this.

I am sure there is something I have not considered.
<p>I don't remember well, but 5.3 would have a mechanism in compiling to
avoid this.

Is it true?

Oh oh..... but I am working with 5.2 (to use ENVI 3.2).
<p>Bye.

<pre>--
Nando Iavarone
Advanced Computer System - SPACE DIVISION
via Lazzaro Belli, 23
00040 Frascati - RM
Tel: +39-6-944091 (switchboard)
            9440968 (direct)
E-mail:
    f.iavarone@acsys.it
    FrdndVrn@altavista.net</pre>
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Subject: Re: recursive functions?
Posted by Nando Iavarone on Thu, 31 Aug 2000 16:30:49 GMT
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<!doctype html public "-//w3c//dtd html 4.0 transitional//en">
<html>
Nando Iavarone wrote:
<blockquote TYPE=CITE>I don't remember well, but 5.3 would have a mechanism
in compiling to avoid this.</blockquote>

<p>
I look better in the manual and:

there exist the FORWARD_FUNCTION statement.
<p>I answer me. Ohhhh.
<p>The problem about the difference about the two code fragment remains?

Why don't they work in the same manner?
<p>Cheers,

Nando.
<pre>--
Nando Iavarone
Advanced Computer System - SPACE DIVISION
via Lazzaro Belli, 23
00040 Frascati - RM
Tel: +39-6-944091 (switchboard)
            9440968 (direct)
E-mail:
    f.iavarone@acsys.it
    FrdndVrn@altavista.net</pre>
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Subject: Re: recursive functions?
Posted by Nando Iavarone on Fri, 01 Sep 2000 09:57:32 GMT
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<!doctype html public "-//w3c//dtd html 4.0 transitional//en">
<html>
David Fanning wrote:
<blockquote TYPE=CITE>....I have to

warn you, however, that with this line your test program

will run forever!</blockquote>
I know, I know.

It was to show the skeleton of the original function without to show
it entirely.

I found already the solution on manual and on..... your www page
:o(

Maybe as first resource I'd search on your web pages.
<p>Have you idea of the difference between the two versions of the test
code?

I think it is important to understand how IDL works.
<p>Bye.
<pre></pre>

<pre>--
Nando Iavarone
Advanced Computer System - SPACE DIVISION
via Lazzaro Belli, 23
00040 Frascati - RM
Tel: +39-6-944091 (switchboard)
            9440968 (direct)
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