
Subject: calling a function in herself

Posted by on Mon, 31 Jul 2000 07:00:00 GMT

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Hy to all!

I have a file with the main-procedure and some functions in it. When I'm in the function e.g h_wahl I want to call the function h_wahl again. Is that possible? When I compile the file, the expression h_wahl is not known in h_wahl.

e.g.

```
;procedure rasterung.pro
```

```
Function H_Wahl(a,b,Steig=steig,Abstand=abstand)
```

```
  If Keyword_Set(abstand) Then .....
```

```
  If Keyword_Set(steig) Then Begin
```

```
    ...
```

```
    return, H_Wahl(c,d,/abstand)
```

```
  Endif
```

```
End
```

```
pro rasterung...
```

Any suggestions?

Thanks in advance,

Subject: Re: calling a function in herself

Posted by [promashkin](#) on Mon, 31 Jul 2000 07:00:00 GMT

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Will FORWARD_FUNCTION do the trick? Or, try placing the new "COMPILE_OPT IDL2" instructuin at the beginning your code. It will enforce strict array subscripting using only [...], and anything with (...) will be considered a function.

Cheers,

Pavel

"Ji½rg Schliwa" wrote:

>

> Hy to all!

>

> I have a file with the main-procedure and some functions in it. When I'm in

> the function e.g h_wahl I want to call the function h_wahl again. Is that

> possible? When I compile the file, the expression h_wahl is not known in
> h_wahl.
>
> e.g.
> ;procedure rasterung.pro
>
> Function H_Wahl(a,b,Steig=steig,Abstand=abstand)
> If Keyword_Set(abstand) Then
>
> If Keyword_Set(steig) Then Begin
> ...
> return, H_Wahl(c,d,/abstand)
> Endif
> End
>
> pro rasterung...
>
> Any suggestions?
>
> Thanks in advance,
> Jiǎrg Schliwa

Subject: Re: calling a function in herself

Posted by [Martin Schultz](#) on Tue, 01 Aug 2000 07:00:00 GMT

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David Fanning wrote:

>
> What has happened to your keyboard, Martin!?
> Better get the ol' WD40 out. :-)
>

errh. nothing to do with the keyboard. J'st m' f'ngrs gettin' sl'ppy
aft' loooon' day ;-)

Cheers,
Martin

--

```

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[[      fax: +49 40 41173-298      [[
[[ martin.schultz@dkrz.de      [[

```

Subject: Re: calling a function

Posted by [David Fanning](#) on Fri, 15 Nov 2002 16:54:56 GMT

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Steve (Steve.Morris@libero.it) writes:

- > I have a program (main.pro) written in IDL. Then, inside the main.pro
- > I want to use a function that I found on Goddard library.
- > The function is named glactc.pro, and the calling sequence is the
- > following:
- > GLACTC, ra, dec, year, gl, gb, j
- > How can I call glactc.pro inside main.pro?

Just exactly as you did right there. That's it! :-)

- > After that, when I compile the program, do I have to link
- > glactc.pro? If yes, how can I do that?

You don't have to compile it. IDL will find it and compile it when it needs it. That is, when it gets to the statement above in your code. Just put it in a file named glactc.pro and make sure the procedure GLACTC is the *last* program module in the file. (This will be true for most of the routines you get from established libraries, but may not be true for most of the routines you get from your buddies.)

- > Is it possible to write "makefile" (like C programming) into IDL?

Forget makefiles. Forget compiling. You are working with IDL now! :-)

Cheers,

David

--

David W. Fanning, Ph.D.

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

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Subject: Re: calling a function

Posted by [James Kuyper](#) on Fri, 15 Nov 2002 18:24:41 GMT

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Steve wrote:

- >
- > Dear all, I have a problem!

- > I have a program (main.pro) written in IDL. Then, inside the main.pro
- > I want to use a function that I found on Goddard library.
- > The function is named glactc.pro, and the calling sequence is the
- > following:
- > GLACTC, ra, dec, year, gl, gb, j
- > How can I call glactc.pro inside main.pro?

If it's really a function (starts with the FUNCTION keyword), then you have to type:

```
result = GLACTC(my_ra, my_dec, my_year, my_gl, my_bg, my_j)
```

On the other hand, if it's a procedure (starts with the PROC keyword), then you have to type:

```
GLACTC, my_ra, my_dec, my_year, my_gl, my_bg, my_j
```

You don't need the 'my_' prefixes, I'm just emphasizing that the names don't need to match; it's also not an error if they do match.

- > After that, when I compile the program, do I have to link
- > glactc.pro? If yes, how can I do that?

No. All you have to do is make sure that glactc.pro is in a directory that's in IDL's search path. That can either be in your current directory, or in one of the directories listed in the IDL_PATH environment variable.

Alternatively, you can load glactc.pro, even if it's not in the IDL_PATH, by typing:

```
IDL> .run /non-idl/path/name/glactc.pro
```

You don't need to add the '.pro' at the end; IDL will figure it out if you leave it out.

Note: if the name of the file is different from the name of the procedure or function that you need to execute, then you have to use the '.run' approach. That's why it's generally a good idea to have the function and the filename match.

- > Is it possible to write "makefile" (like C programming) into IDL?

No, but the reason it's not possible is that it's not really needed.

Subject: Re: calling a function

Posted by [David Fanning](#) on Fri, 15 Nov 2002 18:39:09 GMT

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James Kuyper (kuyper@saicmodis.com) writes:

> IDL> .run /non-idl/path/name/glactc.pro

No sense adding more confusion to an already confusing situation. The average IDL newcomer is totally perplexed about why a .RUN command doesn't run a damn thing, although we long-timers take it as a matter of course.

Please, let's ALL train ourselves to use .COMPILE when we want to compile something. That way we won't all look like idiots to the new users. :-)

Cheers,

David

--

David W. Fanning, Ph.D.

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Subject: Re: calling a function

Posted by [David Fanning](#) on Fri, 15 Nov 2002 18:53:08 GMT

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David Fanning (david@dfanning.com) writes:

> Please, let's ALL train ourselves to use .COMPILE when we
> want to compile something. That way we won't all look like
> idiots to the new users. :-)

Oh, my gosh! I inadvertently violated Commandment Number 3 of the Internet Posters Guild:

Commandment 3: Don't EVER use the words idiot, jerk, numskull, etc. in an Internet communication unless referring specifically to yourself and you alone. Those words are loaded and will be misinterpreted by nearly everyone who reads them, no matter how many smiley faces you use at the end of the sentence.

My apologies to anyone and everyone. I was simply trying to make the point that some of the things we do in IDL don't seem to, uh, make a lot of sense to IDL newcomers. That's all. :-)

Cheers,

David

--

David W. Fanning, Ph.D.
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Subject: Re: calling a function
Posted by [jeyadev](#) on Fri, 15 Nov 2002 19:49:26 GMT
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In article <MPG.183eed2dee8063c0989a22@news.frii.com>,
David Fanning <david@dfanning.com> wrote:
> James Kuyper (kuyper@saicmodis.com) writes:
>
>> IDL> .run /non-idl/path/name/glactc.pro
>
> No sense adding more confusion to an already confusing
> situation. The average IDL newcomer is totally perplexed
> about why a .RUN command doesn't run a damn thing, although

Doesn't is run the main programme, if that is what comes
after it?

> we long-timers take it as a matter of course.

Not completely illogical, is it?

--

Surendar Jeyadev jeyadev@wrc.xerox.bounceback.com

Remove 'bounceback' for email address

Subject: Re: calling a function
Posted by [David Fanning](#) on Sat, 16 Nov 2002 01:34:25 GMT
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Surendar Jeyadev (jeyadev@wrc.xerox.bounceback.com) writes:

>> No sense adding more confusion to an already confusing
>> situation. The average IDL newcomer is totally perplexed
>> about why a .RUN command doesn't run a damn thing, although
>
> Doesn't it run the main programme, if that is what comes
> after it?

Indeed it does. And I even used a main program
back in 1977 sometime.

>
>> we long-timers take it as a matter of course.
>
> Not completely illogical, is it?

Did I say "illogical"? I meant "perverse". :-)

Cheers,

David

--

David W. Fanning, Ph.D.
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