Subject: Re: Stupid Question#1

Posted by davidf on Mon, 02 Nov 1998 08:00:00 GMT

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Hi Folks,

- > am having a spot of bother with smething that should be really
- > simple. I cannot get FORDO BEGIN ENDFOR loops to work.

This question reminds me that I have several books that are "factory seconds"--books that are slightly blemished in some way. I always feel guilty charging full price for these books, so I have been selling them to students at greatly reduced prices. If anyone is interested, contact me. There are almost always one or two hanging around.

Cheers,

David

David Fanning, Ph.D.

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Phone: 970-221-0438, Toll-Free Book Orders: 1-888-461-0155 Covote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Stupid Question#1

Posted by Kevin Ivory on Mon, 02 Nov 1998 08:00:00 GMT

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rob cosgrave wrote:

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- > simple. I cannot get FORDO BEGIN ENDFOR loops to work. I thought
- > first it was something to do with my program, so I tried a really simple
- > one, and that didn't work. Then I cut and paste the example out of the
- > online documentation and that didn't work. And then I tried running one
- > of the scripts which came with IDL and that didn't work either. They
- > all failed at the endfor, and didn't close the loop.

Block statements (statements with BEGIN and END) only work in procedures and functions, not in interactive mode.

If you need to learn how to program procedures/functions, you probably should start off with the online books 'Using IDL' and 'Building IDL Applications'. You will find them by pressing the 'Contents' button of the IDL online help.

Best regards, Kevin

--

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Subject: Re: Stupid Question#1

Posted by davidf on Mon, 02 Nov 1998 08:00:00 GMT

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rob cosgrave (r.cosgrave@ucc.ie) writes:

- > am having a spot of bother with smething that should be really
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- > of the scripts which came with IDL and that didn't work either. They
- > all failed at the endfor, and didn't close the loop.
- > I thought it was just me doing something stupid, but when
- > the programs that came with it failed also...
- > My version is the IDL student on a Win95 machine. Could the
- > student editionness be the problem?
- > Again, apologies for the dumb question, but this is driving me crazy,
- > and it's kinda hard to program without loops!

I'm guessing that you are trying to run these FOR loops at the IDL command line and that is what is causing you the problems. A FOR loop is a single command to the IDL interpreter, so you must enter it as a single command at the IDL command line. This involves a bunch of line continuation and line concatenation characters be used. The loop will look something like this:

IDL> FOR j=0,4 DO BEGIN \$
IDL> Print, j & \$
IDL> Print, j*2 & \$
IDL> ENDFOR

This is such a pain in the neck to write that no one bothers. (Plus, if you make a typing mistake on *any* line, you have to go back to the beginning; you can't just fix the offending line.) Most people put this kind of loop into a program unit of some type. For example, you could put this loop into a main-level program by

writing it like this in a file:

```
FOR j=0,4 DO BEGIN
Print, j
Print, j*2
ENDFOR
END
```

Notice the final END at the end of the file. Name this file "doloop.pro". To run the loop, type this:

```
IDL> .RUN doloop
```

This command actually compiles the FOR loop as a single statement before it is run, so you don't have to worry about line continuation and line concatenation characters. The compiler is MUCH smarter than the interpreter. :-)

If you want to run a compiled main-level program again, all you have to do is this:

```
IDL> .Go
```

Another alternative is to put the loop into an IDL procedure. All you need to do is add a procedure definition line to the DOLOOP program, like this:

PRO DOLOOP FOR j=0,4 DO BEGIN Print, j Print, j*2 ENDFOR END

To compile and run this program you do this:

```
IDL> .Compile doloop IDL> doloop
```

Thanks for asking this question. A lot of people give up before admitting they don't know something. :-)

Good luck with your programming!

Cheers,

David

David Fanning, Ph.D.

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Phone: 970-221-0438, Toll-Free Book Orders: 1-888-461-0155 Coyote's Guide to IDL Programming: http://www.dfanning.com/

Note: A copy of this article was e-mailed to the original poster.

Subject: Re: Stupid Question#1

Posted by Harald Frey on Tue, 03 Nov 1998 08:00:00 GMT

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rob cosgrave wrote:

- > Hi Folks,
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- > and it's kinda hard to program without loops!
- > thanks
- > Rob Cosgrave

It's hard to make a diagnostics without the lines that failed. However, I assume that you tried the FOR-loop in the interactive mode and did not take into account that this works only on one line and that you have to combine multiple statements with the "\$" and/or "&" characters.

One simple example:

for i=0,10 do begin & print,i & j=i^2 & print,j & endfor

Harald frey hfrey@ssl.berkeley.edu