

---

Subject: FOR LOOP problem

Posted by [skd6](#) on Fri, 31 May 2002 20:44:35 GMT

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Hi,

I am very much new to IDL. Could anyone please tell me what the problem is with this .pro file?

```
*****
image = bytarr(462, 350)
image_mod = bytarr(462, 350)
openr, 1, FILEPATH(SUB=['examples','data'], '400_400_gb')
readu, 1, image
FOR i = 0, 461 DO BEGIN
    FOR j = 0, 349 DO image_mod[i,j] = image[i,j]
ENDFOR
close, 1
*****
```

It gives me the following error message :

```
*****
% Attempt to subscript IMAGE with I is out of range.
% Execution halted at: $MAIN$
ENDFOR
^
% Syntax error.
At: D:\webpages\IONJava\examples\ndvi_pro.pro, Line 7
*****
```

Thanks,  
Shravan Kumar Durvasula

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---

Subject: Re: FOR LOOP problem

Posted by [R.Bauer](#) on Wed, 05 Jun 2002 06:41:00 GMT

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---

Shravan Kumar Durvasula wrote:

```
>
> Hi,
>
> I am actually working on IONJava. I have a strange problem. This is
> the .pro file that i have written :
```

Dear Shravan

are you sure that it is really the same file for ion and idl?

Reimar

```
>
> *****
> band4_image = bytarr(420, 345)
> band3_image = bytarr(420, 345)
> final_image = bytarr(420, 345)
> OPENR, 1, FILEPATH(SUB=['examples','data'], 'band_4')
> OPENR, 2, FILEPATH(SUB=['examples','data'], 'band_3')
> READU, 1, band4_image
> READU, 2, band3_image
> FOR i = 0,419 DO BEGIN
>   FOR j = 0,344 DO final_image[i,j] = band4_image[i,j]
> ENDFOR
> CLOSE, 1
> CLOSE, 2
> TV, final_image
> END
> *****
>
> When i compile and run this program from the IDL command prompt, it
> runs absolutely fine. But when i run this file through IONJava using
> the "executeIDLCommand()" (method in the IONGraphicsClient class of
> IONJava) it gives the following error message :
>
> *****
> % Attempt to subscript BAND3_IMAGE with I is out of range.
> % Execution halted at: $MAIN$
> ENDFOR
> ^
> % Syntax error.
> At: D:\webpages\IONJava\examples\ndvi_pro.pro, Line 10
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> OPENR, 2, FILEPATH(SUB=['examples','data'], 'band_3')
> READU, 1, band4_image
```

```

> READU, 2, band3_image
> FOR i = 0,419 DO FOR j = 0,344 DO final_image[i,j] = band4_image[i,j]
> CLOSE, 1
> CLOSE, 2
> TV, final_image
> END
> *****
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> it said Syntax error. But i could not correct it. Could anyone please
> help? Any suggestions given on this would be of great help to me.
>
> Thanks,
> Shravan Kumar Durvasula
>
> David Fanning <david@dfanning.com> wrote in message
news:<MPG.176198a6982878fc989905@news.frii.com>...
>> Shravan Kumar Durvasula (skd6@ra.msstate.edu) writes:
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>> end of the program file (after the CLOSE statement),
>> then run it like this from the IDL command line:
>>
>> IDL> .Run ndvi_pro
>>
>> Does that work better? This will compile the code before
>> it tries to run it. I think that will work better for you.
>>
>> I should point out that you can more easily do what you
>> want to do (and a hell of lot faster!) by simply writing this:
>>
>> image_mod = image
>>
>> Cheers,
>>
>> David
```

--

Reimar Bauer

Institut fuer Stratosphaerische Chemie (ICG-I)  
Forschungszentrum Juelich  
email: R.Bauer@fz-juelich.de

-----  
a IDL library at ForschungsZentrum Juelich  
[http://www.fz-juelich.de/icg/icg1/idl\\_icglib/idl\\_lib\\_intro.h\\_tml](http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.h_tml)  
=====

---

Subject: Re: FOR LOOP problem  
Posted by [skd6](#) on Wed, 05 Jun 2002 18:28:18 GMT  
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---

Hi Reimar,

Thank you vesy much for your help.

Well I am very new to this. But as far as i understand IONJava just  
uses the file written in IDL. All that IONJava does is gets the IDL on

to the net. You do that by running the IDL file (\*.pro file) with the statement "executeIDLCommand()". Also, i have looked at some of the example IONJava files that use the .pro file. They basically use the same file written in IDL.

Thanks,  
Shravan Kumar Durvasula

Reimar Bauer <r.bauer@fz-juelich.de> wrote in message  
news:<3CFDB27C.7825A25A@fz-juelich.de>...

> Shravan Kumar Durvasula wrote:

>>

>> Hi,

>>

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>> the .pro file that i have written :

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> Dear Shravan

>

> are aou sure that it is really the same file for ion and idl?

>

> Reimar

>>

>> \*\*\*\*\*

>> band4\_image = bytarr(420, 345)

>> band3\_image = bytarr(420, 345)

>> final\_image = bytarr(420, 345)

>> OPENR, 1, FILEPATH(SUB=['examples','data'], 'band\_4')

>> OPENR, 2, FILEPATH(SUB=['examples','data'], 'band\_3')

>> READU, 1, band4\_image

>> READU, 2, band3\_image

>> FOR i = 0,419 DO BEGIN

>>   FOR j = 0,344 DO final\_image[i,j] = band4\_image[i,j]

>> ENDFOR

>> CLOSE, 1

>> CLOSE, 2

>> TV, final\_image

>> END

>> \*\*\*\*\*

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>> runs absolutely fine. But when i run this file through IONJava using  
>> the "executeIDLCommand()" (method in the IONGraphicsClient class of  
>> IONJava) it gives the following error message :

>>

>> \*\*\*\*\*

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>> % Execution halted at: \$MAIN\$

```

>> ENDFOR
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>> % Syntax error.
>> At: D:\webpages\IONJava\examples\ndvi_pro.pro, Line 10
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>>
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>>> IDL> .Run ndvi_pro
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>>> Does that work better? This will compile the code before
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>>> I should point out that you can more easily do what you
>>> want to do (and a hell of lot faster!) by simply writing this:
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>>> Cheers,
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>
> --
> Reimar Bauer
>

```

> Institut fuer Stratosphaerische Chemie (ICG-I)  
> Forschungszentrum Juelich  
> email: R.Bauer@fz-juelich.de  
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> =====

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Subject: Re: FOR LOOP problem  
Posted by [Craig Markwardt](#) on Wed, 05 Jun 2002 19:46:32 GMT  
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skd6@ra.msstate.edu (Shravan Kumar Durvasula) writes:

> Hi,  
>  
> I am actually working on IONJava. I have a strange problem. This is  
> the .pro file that i have written :  
>  
> ...  
>  
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> runs absolutely fine. But when i run this file through IONJava using  
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> be. I was wondering if it had anything to do with the indentation as  
> it said Syntax error. But i could not correct it. Could anyone please  
> help? Any suggestions given on this would be of great help to me.

IDL makes the distinction of what can be run on the command line, and what can be placed in a compiled procedure. Items that appear on the command line are more restricted. For example you can't have multi-line BEGIN/END clauses, which is exactly what you are seeing.

This is also the distinction between the "@" command, and the ".RUN" command. The former accepts only simple commands, while the latter expects a fully formed procedure, finished with END, but is able to take BEGIN/END clauses. The EXECUTE() statement, upon which executeIDLCommand() must be based, also falls in the former category,



so that's why you are getting errors. Why don't you just stuff all this into its own procedure?

Good luck,  
Craig

--

-----  
Craig B. Markwardt, Ph.D.      EMAIL: craigmnet@cow.physics.wisc.edu  
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response  
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Subject: Re: FOR LOOP problem  
Posted by [skd6](#) on Wed, 05 Jun 2002 20:27:02 GMT  
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---

Hi,

I think it is finally working. It all depends on the way you run it. I took the idea from David Fanning when he suggested to run the .pro file as  
IDL> .Run ndvi\_pro

Actually in IONJava the way we run it is like this :

```
*****  
igclient.executeIDLCommand("@ndvi_pro.pro");  
*****
```

where "igclient" is an "IONGraphicsClient" object. When i replaced this statement with :

```
*****  
igclient.executeIDLCommand(".run ndvi_pro");  
*****
```

it is working fine. Could anyone please tell what is the difference in running a ndvi\_pro.pro file in these two different ways :

```
@ndvi_pro.pro  
.Run ndvi_pro
```

Thanks to all those who helped me solve the problem.

Best Regards,  
SKD

Reimar Bauer <r.bauer@fz-juelich.de> wrote in message  
news:<3CFDB27C.7825A25A@fz-juelich.de>...

> Shravan Kumar Durvasula wrote:

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> Dear Shravan

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> Reimar

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>> ENDFOR

>> CLOSE, 1

>> CLOSE, 2

>> TV, final\_image

>> END

>> \*\*\*\*\*

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>> ENDFOR

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>> % Syntax error.

>> At: D:\webpages\IONJava\examples\ndvi\_pro.pro, Line 10

>> END

>> ^

```

>> % Syntax error.
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> email: R.Bauer@fz-juelich.de
> -----
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> http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.h tml

```

> =====

---

Subject: Re: FOR LOOP problem  
Posted by [R.Bauer](#) on Mon, 10 Jun 2002 16:04:53 GMT  
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---

Paul Sorenson wrote:

>  
> "Reimar Bauer" <r.bauer@fz-juelich.de> wrote in message  
> news:3CFB1297.BAC0ACAE@fz-juelich.de...  
>> Doug Rowland wrote:  
>>>  
>>> What happens if the image you are reading in is only 400x400 bytes (as  
> seems  
>>> to be implied by the filename)?  
>>> Does readu then redefine image to be a 400x400 array or does it just  
> leave  
>>> the rest of the 462x350 array blank?  
>>  
>> Dear Doug,  
>>  
>> the rest 1700 bytes will be 0b and the size is (462, 350).  
>> This gives no new information.  
>>  
>> It's not easy to examine the right size of a binary file.  
>> First step could be to examine by fstat the byte size.  
>> Then the data could be read as byte vector.  
>  
> You can do this with one command:  
>  
> IDL> vector = read\_binary()

I know  
but this is not working in runtime because of execute.

>> If you have an idea how it is organized you can use a reform  
>> to put it in the correct size.  
>  
> You can read it and reform it in one command:  
>  
> IDL> array = read\_binary(data\_dims=[400, 400])

>

```

> -Paul Sorenson
>>
>> Reimar
>>
>>
>>
>>
>>
>>
>>
>>>
>>> How about trying this:
>>>
>>> image = bytarr(462, 350)
>>> image_mod = bytarr(462, 350)
>>> openr, 1, FILEPATH(SUB=['examples','data'], '400_400_gb')
>>> readu, 1, image
>>> print,size(image)
>>> close,1
>>> end
>>>
>>> Doug Rowland
>>> rowland@fields.space.umn.edu
>>>
>>> On 05/31/02 4:27 PM, in article
> MPG.176198a6982878fc989905@news.frii.com,
>>> "David Fanning" <david@dfanning.com> wrote:
>>>
>>>> Shravan Kumar Durvasula (skd6@ra.msstate.edu) writes:
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>> -----
>> a IDL library at ForschungsZentrum Juelich
>> http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.h tml
>> =====
>
> -----== Posted via Newsfeed.Com - Uncensored Usenet News ==-----
> http://www.newsfeed.com The #1 Newsgroup Service in the World!
> ----- Over 100,000 Newsgroups - Unlimited Fast Downloads - 19 Servers -----
>
--
Reimar Bauer

```

Institut fuer Stratosphaerische Chemie (ICG-I)  
Forschungszentrum Juelich  
email: R.Bauer@fz-juelich.de

-----  
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[http://www.fz-juelich.de/icg/icg1/idl\\_icglib/idl\\_lib\\_intro.h tml](http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.html)