
Subject: Re: IDL and me!

Posted by [Craig Markwardt](#) on Wed, 21 Sep 2005 14:36:51 GMT

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"Liberum" <shejo284@gmail.com> writes:

```
> Hi Guys and Gals,
>
> As a nascent IDL user I have come across a little problem that really
> chaps my hide! Any help would really be appreciated!
> Consider the following file-reading code:
>
> OPENR, LUN, file, /GET_LUN
> s = ""
> FOR i = 0, n_lines - 1 DO BEGIN
>   READF, LUN, s ; reads the file line by line into string s
>   d = STRSPLIT(s, /EXTRACT)
>   col1 = d[0] & col2 = d[1] & col3 = d[2] & col4 = d[3]
>   IF FIX(col1) EQ -10 THEN bias[i] = 0
>   IF FIX(col1) EQ -5 THEN bias[i] = 1
>   IF FIX(col1) EQ -1 THEN bias[i] = 2
>   IF FIX(col1) EQ 0 THEN bias[i] = 3
>   IF FIX(col1) EQ 1 THEN bias[i] = 4
>   IF FIX(col1) EQ 5 THEN bias[i] = 5
>   IF FIX(col1) EQ 10 THEN bias[i] = 6
>   cth[i] = LONG(col2)
>   occur[i] = LONG(col3)
>   pixels[i] = LONG(col4)
>   hist_data[bias[i], cth[i] - 1] = FLOAT(occur[i])/pixels[i]*100.
>   i += 1
> ENDFOR
> FREE_LUN, LUN
>
> Now all I'm trying to do is to read the contents of this file into an
> array. Now when I run this script I get:
>
> % Attempt to subscript D with <INT ( 1)> is out of range.
>
> Now how can this be when d has 4 elements and I have not looped outside
> of [0, 3] ??????????????
```

You might have to consider the case when D does **not** have four elements. For example, a blank line at the end of the file might do that. A simple, "IF N_ELEMENTS(D) LT 4 THEN CONTINUE" at the right place might do the trick.

Good luck,
Craig

--

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

Subject: Re: IDL and me!

Posted by [David Fanning](#) on Wed, 21 Sep 2005 14:45:21 GMT

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Liberum writes:

> As a nascent IDL user I have come across a little problem that really
> chaps my hide!

In my experience, 99% of the time this problem is a problem
with assumptions. That is to say, programmer error. You need
more detective work here. Learn how to set breakpoints and
step through your code.

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: IDL and me!

Posted by [Antonio Santiago](#) on Wed, 21 Sep 2005 15:11:12 GMT

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Liberum wrote:

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> IF FIX(col1) EQ 10 THEN bias[i] = 6
> cth[i] = LONG(col2)
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> pixels[i] = LONG(col4)
> hist_data[bias[i], cth[i] - 1] = FLOAT(occur[i])/pixels[i]*100.
> i += 1
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> Now how can this be when d has 4 elements and I have not looped outside
> of [0, 3] ??????????????
>
> Sincerely,
> Lib
>

```

Perhaps ASCII_TEMPLATE can be useful for you.

--

Antonio Santiago Piñeres
(email: santiago<at>grahi.upc.edu)
(www: http://www.grahi.upc.edu/santiago)
(www: http://asantiago.blogspot.org)

GRAHI - Grup de Recerca Aplicada en Hidrometeorologia
Universitat Politècnica de Catalunya

Subject: Re: IDL and me!
Posted by [Paolo Grigis](#) on Wed, 21 Sep 2005 15:30:14 GMT
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Liberum wrote:
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```

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>   pixels[i] = LONG(col4)
>   hist_data[bias[i], cth[i] - 1] = FLOAT(occur[i])/pixels[i]*100.

```

Maybe unrelated... but are you sure you need the following line in a for-loop over i? It is usually quite dangerous to change the values of loop counter variables.

Ciao,
Paolo

```

>   i += 1
> ENDFOR
> FREE_LUN, LUN
>
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> array. Now when I run this script I get:
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> % Attempt to subscript D with <INT    (    1)> is out of range.
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```

Subject: Re: IDL and me!

Posted by [Timm Weitkamp](#) on Wed, 21 Sep 2005 15:40:48 GMT

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David Fanning wrote:

> Liberum writes:

>

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>> chaps my hide!

>

> You need more detective work here. Learn how to set breakpoints and

> step through your code.

As a start, even without setting any breakpoints, typing "HELP, D" at the command line just after the error occurs will tell you how many elements D actually has at that point. And, just like the others here, I should think the answer is not 4, not even 3 or 2.

As an aside: shouldn't the "i += 1" line before ENDFOR better be left out?

Happy debugging

Timm

Timm Weitkamp, ESRF, Grenoble, France
