Subject: Re: Why doesn't this work?
Posted by Tim Abbott on Thu, 09 Jan 1997 08:00:00 GMT
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Oops, as Joe Gurman points out, if all the numbers are 3 digits long
the fix is to use format='(4(1X,I3))'. Unfortunately, the numbers
will not always be 3 digits long...

Tim Abbott wrote:
>
> Can anyone tell me why this doesn't work?
>
> I need to extract the four numbers from the string "[123:456,246:135]"
>
> Here is the code segment I'm trying to use:
> IDL> str = "[123:456,246:135]"
> IDL> reads,str,x1,x2,x3,x4,format='(4(1X,I0))'
> % Unable to apply format code I to input: "]".
> % Execution halted at: $MAIN$
> IDL> print,x1,x2,x3
>   123.000   246.000   0.00000
> IDL> print,x1,x2,x3,x4
> % PRINT: Variable is undefined: X4.
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>
> Any ideas?
>
> --
> Timothy M. C. Abbott
> http://www.cfht.hawaii.edu/~tmca/tmca.html

--
Timothy M. C. Abbott
http://www.cfht.hawaii.edu/~tmca/tmca.html

Subject: Re: Why doesn't this work?
Posted by joseph.b.gurman on Thu, 09 Jan 1997 08:00:00 GMT
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In article <32D58AF7.51A8@cfht.hawaii.edu>, Tim Abbott
<tmca@cfht.hawaii.edu> wrote:

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   Tim -

   It looks like it's trying to read the final "]" because you're using
I0 --- do you need to do that, or do you know that all your integer
strings will be three characters long? If so, of course, you could just
use:

IDL> reads, str , x1, x2, x3, x4, format = '(4(1X, I3))'

which gives:

IDL> print, x1, x2, x3, x4
      123.000   456.000   246.000   135.000

   Sorry if I'm missing the point; I thought it might have to do with the
lack of oxygen at the telescope....

            Joe Gurman

--
J.B. Gurman / Solar Physics Branch/ NASA Goddard Space Flight Center/
Greenbelt MD 20771 USA / joseph.b.gurman@gsfc.nasa.gov
| Federal employees are still prohibited from holding opinions while at |
| work. Therefore, any opinions expressed herein are somebody else's. |

Subject: Re: Why doesn't this work?
Posted by davidf on Mon, 13 Jan 1997 08:00:00 GMT
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> Any ideas?

The main reason this doesn't work, I think, is that the READS
procedure and the I0 format require more carefully formatted
input than they are getting here. In particular, they really
don't know how to handle the colons.

You can get this example to work if you perform a little
bit of "processing" on the string to turn the colons into
commas.

I suggest something like this:

```
comma = 44B
colon = 58B
str = "[123:456,246:135]"
array = BYTE(str)
colonLocations = WHERE(array EQ colon, count)
IF count GT 0 THEN array(colonLocations) = comma
str = STRING(array)
READS, str, x1, x2, x3, x4, FORMAT='(4(1X,I0))'
PRINT, x1, x2, x3, x4
```

Yours,

David

David Fanning, Ph.D.
Fanning Software Consulting
2642 Bradbury Court, Fort Collins, CO 80521
Phone: 970-221-0438   Fax: 970-221-4762
E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com

Subject: Re: Why doesn't this work?
Posted by davidf on Mon, 13 Jan 1997 08:00:00 GMT
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Tim Abbott writes:

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PRINT, x1, x2, x3, x4
```

Yours,

David

David Fanning, Ph.D.
Fanning Software Consulting
2642 Bradbury Court, Fort Collins, CO 80521
Phone: 970-221-0438   Fax: 970-221-4762
E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com

Subject: Re: Why doesn't this work?
Posted by David Foster on Tue, 14 Jan 1997 08:00:00 GMT
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Tim Abbott wrote:
>
> Can anyone tell me why this doesn't work?
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> IDL> print,x1,x2,x3
>   123.000   246.000   0.00000
> IDL> print,x1,x2,x3,x4
> % PRINT: Variable is undefined: X4.
> % Execution halted at: $MAIN$
>

Tim -

I've mailed you a copy of my routine GET_TOKEN.PRO that
allows you to read byte, int, long, float, double and string
values from a string, as tokens. The routine maintains a string
pointer for subsequent calls.

You can parse the above string using:

```
IDL> str = "[123:456,246:135]"
IDL> pos=0
IDL> s1 = get_token( str, pos, sep='[:,]', /increment)
IDL> s2 = get_token( str, pos, sep='[:,]', /increment)
IDL> s3 = get_token( str, pos, sep='[:,]', /increment)
IDL> s4 = get_token( str, pos, sep='[:,]', /increment)
IDL> help, s1,s2,s3,s4
S1          STRING   = '123'
```

```
S2          STRING   = '456'
S3          STRING   = '246'
S4          STRING   = '135'
```

If anyone else is interested, send me an email and I'll send
you a copy.

Dave
--

```
  ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ ~~~~~~
   David S. Foster        Univ. of California, San Diego
    Programmer/Analyst    Brain Image Analysis Laboratory
   foster@bial1.ucsd.edu  Department of Psychiatry
    (619) 622-5892         8950 Via La Jolla Drive, Suite 2200
                   La Jolla, CA  92037
                   [ UCSD Mail Code 0949 ]
  ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ ~~~~~~
```