
Subject: Re: Testing validity of numerical content of a string
Posted by [David Fanning](#) on Thu, 07 Dec 2006 01:38:15 GMT
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Y.T. writes:

> Maybe this is a stupid question, but is there a way in IDL to tell
> whether a string contains a valid representation of a particular data
> type? For example an integer? I can do something like
>
> test = fix(str)
>
> which will return zero (and throw an error message) if str is, say,
> "hello". But is there a way to tell whether type conversion of a string
> will work if attempted?
>
> Anybody have something clever at hand?

Clever's not really my thing. You would have to go to JD for that. But FSC_FIELD has a neat little function named "VALIDATE" that validates whether a string is a float or double or an integer, whatever it is suppose to be. You might be able to steal that and do something clever with it. :-)

http://www.dfanning.com/programs/fsc_field.pro

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Testing validity of numerical content of a string
Posted by [Brian Larsen](#) on Thu, 07 Dec 2006 01:49:41 GMT
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On Dec 6, 6:38 pm, David Fanning <n...@dfanning.com> wrote:

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>> whether a string contains a valid representation of a particular data
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One "unixy" way to do this is with regular expressions. I end up using these all the time (any should more).

Play with something like:

```
IDL> a='hello'
IDL> print, stregex(a, '[a-zA-Z]', /boolean)
1
IDL> b='3.14159'
IDL> print, stregex(b, '[a-zA-Z]', /boolean)
0
```

And one could work out a better regexp that looked for other non-numeric chars as well.

This is good and easy.

Cheers,
Brian

Subject: Re: Testing validity of numerical content of a string
Posted by [Brian Larsen](#) on Thu, 07 Dec 2006 02:50:25 GMT
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I just read you post a little closer and the numbers you have are more complicated but not too bad.

```
IDL> print, stregex('hello', '[a-df-zA-DF-Z]', /boolean)
1
IDL> print, stregex('3.14159', '[a-df-zA-DF-Z]', /boolean)
0
IDL> print, stregex('3.14159e3', '[a-df-zA-DF-Z]', /boolean)
0
```

To make it work perfectly you would need to know a little more info about what could be there but if's based on these regular expressions can tell the difference between 'hello' and '-.3e-4' which can then build valid_float.pro.

When I can't remember the syntax I always grab my sed & awk book but there are plenty of online references as well.

Cheers,

Brian

On Dec 6, 6:49 pm, "Brian Larsen" <balar...@gmail.com> wrote:
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