Subject: Re: how to tell it is character or it is number? Posted by wlandsman on Tue, 07 Aug 2007 15:38:18 GMT

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- > Is there a way I can tell whether it is numbers or it is characters?
- > 'fix' command can convert the numbers, it will give an error message
- > then continue to the execution.

There are lots of programs around to do this, with two variants. The first tests, as you suggest, whether IDL can convert the string into a numeric value

http://idlastro.gsfc.nasa.gov/ftp/pro/misc/strnumber.pro

But IDL will consider the string '1qz_3' to be a valid number (=1) so if you want a more usual interpretation, you need a more detailed test of whether the ordering of digits, letters and decimal points make sense as in

http://idlastro.gsfc.nasa.gov/ftp/pro/misc/valid_num.pro

--Wayne

Subject: Re: how to tell it is character or it is number? Posted by Conor on Tue, 07 Aug 2007 17:41:23 GMT View Forum Message <> Reply to Message

On Aug 7, 11:38 am, wlandsman <wlands...@gmail.com> wrote:

- >> Is there a way I can tell whether it is numbers or it is characters?
- >> 'fix' command can convert the numbers, it will give an error message
- >> then continue to the execution.
- > There are lots of programs around to do this, with two variants. The
- > first tests, as you suggest, whether IDL can convert the string into a
- > numeric value

> http://idlastro.gsfc.nasa.gov/ftp/pro/misc/strnumber.pro

- > But IDL will consider the string '1qz_3' to be a valid number (=1) so
- > if you want a more usual interpretation, you need a more detailed
- > test of whether the ordering of digits, letters and decimal points
- > make sense as in
- > http://idlastro.gsfc.nasa.gov/ftp/pro/misc/valid_num.pro
- > --Wayne

>

I would just try stregex. From what you've shown so far, all it would take is this:

if stregex(string, '[^0-9]', /boolean) then ; this not numeric else ; this is numeric

that is assuming, of course, that the numeric data you will be checking only contains the numbers 0-9. If you have negative signs, or decimal points, or whitespace, then above regular expression will have to be adjusted accordingly.

Subject: Re: how to tell it is character or it is number? Posted by Haje Korth on Tue, 07 Aug 2007 17:48:42 GMT View Forum Message <> Reply to Message

just use the byte function and check the values. Numbers 0-9 have ASCII values of 48-57 dec or 30-39 hex. Haie

```
"queiny" <queiny98@yahoo.com> wrote in message
news:1186499635.496862.33320@d55g2000hsg.googlegroups.com...
> Hi.
>
> I am reading in many line of mixed characters and numbers.
> AA,01,02,003,andefg
> BB,02,03,006,edjkflg
> FF,01,02,abc,eirjfdkf
> ......
> I need information from the 4th field, which can be either number or
> character. After I parsed the long records, I singled out this field.
> Is there a way I can tell whether it is numbers or it is characters?
> 'fix' command can convert the numbers, it will give an error message
> then continue to the execution.
>
> Thanks,
```

Subject: Re: how to tell it is character or it is number? Posted by queiny on Tue, 07 Aug 2007 17:59:48 GMT View Forum Message <> Reply to Message

Many thanks!!

>

I think both of your suggestions work for me. Someone also suggest use function 'byte' to see whether it is number or character.

- >> http://idlastro.gsfc.nasa.gov/ftp/pro/misc/valid_num.pro
- > I would just try stregex. From what you've shown so far, all it would
- > take is this:
- > if stregex(string, '[^0-9]', /boolean) then ; this not numeric
- > else; this is numeric
- > that is assuming, of course, that the numeric data you will be
- > checking only contains the numbers 0-9. If you have negative signs,
- > or decimal points, or whitespace, then above regular expression will
- > have to be adjusted accordingly.