ChristopherFlorio@gmail.com wrote:
> I am having a problem with the STRSPLIT function.
> I am using it to extract the file extension from a string where it
> might not be at the end.
> However in the process I am also eliminating addition elements, not
> found in the extension.
> For example
>
> file='Image.img'
> filter='*.img'
>
> file=STRJOIN(STRSPLIT(file,filter,/EXTRACT))
>
> file='Iae'
>
> desired output:
> file='Image'
>
> Is there a way, with the same input as above, not to extract individual
> parts of the name found in the filter/pattern?
>

 From the docs, about a normal "filter" argument:

"One or more single characters, each of which is considered to be a
separator. String will be split when any of the characters is detected.
For example, if Pattern is " ," String will be split whenever either a
space or a comma is detected. In this case, IDL performs a simple string
search for the specified characters. This method is simple and fast."

But the filter can also be a regular expression:

IDL> file = 'Image.img'
IDL> filter = '\.img'
IDL> print, strjoin(strsplit(file, filter, /regex, /extract))
Image

The "\" is needed in the filter to escape "."'s special meaning (it
matches any character).

By the way, the docs on a regular expression "filter" argument:

"If the REGEX keyword is specified, Pattern is considered to be a single
regular expression (as implemented by the STREGEX function). This method

is slower and more complex, but can handle extremely complicated Pattern strings."

If you want more information about regular expressions, see

   http://michaelgalloy.com/2006/06/11/regular-expressions.html

Mike
--
www.michaelgalloy.com

Subject: Re: String Spliting
Posted by ChristopherFlorio on Wed, 19 Jul 2006 16:51:22 GMT
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Thanks. Works fine now.

Michael Galloy wrote:
> ChristopherFlorio@gmail.com wrote:
>> I am having a problem with the STRSPLIT function.
>> I am using it to extract the file extension from a string where it
>> might not be at the end.
>> However in the process I am also eliminating addition elements, not
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> IDL> print, strjoin(strsplit(file, filter, /regex, /extract))
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>
> The "\" is needed in the filter to escape "."'s special meaning (it
> matches any character).
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>
> "If the REGEX keyword is specified, Pattern is considered to be a single
> regular expression (as implemented by the STREGEX function). This method
> is slower and more complex, but can handle extremely complicated Pattern
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> If you want more information about regular expressions, see
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>   http://michaelgalloy.com/2006/06/11/regular-expressions.html
>
> Mike
> --
> www.michaelgalloy.com

Subject: Re: String Spliting
Posted by JD Smith on Wed, 19 Jul 2006 17:39:15 GMT
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On Wed, 19 Jul 2006 07:49:10 -0700, ChristopherFlorio wrote:

> I am having a problem with the STRSPLIT function. I am using it to extract
> the file extension from a string where it might not be at the end.
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> in the extension.
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> file=STRJOIN(STRSPLIT(file,filter,/EXTRACT))
>
> file='Iae'
>
> desired output:
> file='Image'

>
> Is there a way, with the same input as above, not to extract individual
> parts of the name found in the filter/pattern?

Just a guess, but you'd probably be happier with:

 file=file_basename(file,'.img')

(which strips any leading directory too).

JD

Actually now I am having a new problem. I want to put text on the other
side of the asterisk.

file='ImageEarth2.img'
filter='Image*.img'

file=STRJOIN(STRSPLIT(file,filter,/EXTRACT,/REGEX))
file='ImageEarth2.img'

with file=STRJOIN(STRSPLIT(file,filter,/EXTRACT))
file='Erth2'

Any Suggestions?

JD Smith wrote:
> On Wed, 19 Jul 2006 07:49:10 -0700, ChristopherFlorio wrote:
>
>> I am having a problem with the STRSPLIT function. I am using it to extract
>> the file extension from a string where it might not be at the end.
>> However in the process I am also eliminating addition elements, not found
>> in the extension.
>> For example
>>
>> file='Image.img'
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>>
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>>
>> file='Iae'
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>> desired output:

>> file='Image'
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>> Is there a way, with the same input as above, not to extract individual
>> parts of the name found in the filter/pattern?
>
> Just a guess, but you'd probably be happier with:
>
> file=file_basename(file,'.img')
>
> (which strips any leading directory too).
>
> JD

Subject: Re: String Spliting
Posted by mmiller3 on Wed, 19 Jul 2006 19:49:50 GMT

>>>> > ChristopherFlorio <ChristopherFlorio@gmail.com> writes:

> I am having a problem with the STRSPLIT function. I am
> using it to extract the file extension from a string where
> it might not be at the end. However in the process I am
> also eliminating addition elements, not found in the
> extension. For example

> file='Image.img' filter='*.img'

> file=STRJOIN(STRSPLIT(file,filter,/EXTRACT))

> file='Iae'

> desired output: file='Image'

The pattern argument to strsplit is either a single character, or
a regular expression. You are using '*.img' as a regular
expresion and therefore are splitting on any string that looks
like zero or more characters followed by i, m or g. If you want
to split in the '.', use '.' as your split: strsplit(file, '.',
/extract)

IDL> print, (strsplit('Image.img', '.', /extract))[0]
Image

If you want to strip off the extension, you can use strmid and
strpos. (Reverse_search is handy for gettign the last match,
rather than the first)

```
IDL> file='Image.img'
IDL> print, strmid(file, 0, strpos(file,'.', /reverse_search))
Image
IDL> file='Image.with.multiple.periods.img'
IDL> print, strmid(file, 0, strpos(file,'.'))
Image
IDL> print, strmid(file, 0, strpos(file,'.', /reverse_search))
Image.with.multiple.periods
```

Mike

Subject: Re: String Spliting
Posted by Michael Galloy on Wed, 19 Jul 2006 20:03:43 GMT
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ChristopherFlorio@gmail.com wrote:
> Actually now I am having a new problem. I want to put text on the other
> side of the asterisk.
>
> file='ImageEarth2.img'
> filter='Image*.img'
>
> file=STRJOIN(STRSPLIT(file,filter,/EXTRACT,/REGEX))
> file='ImageEarth2.img'
>
> with file=STRJOIN(STRSPLIT(file,filter,/EXTRACT))
> file='Erth2'
>
> Any Suggestions?
>

The desired output is 'ImageEarth2'? I'm not sure what the entire line
looks like, but how about this?

```
IDL> file = 'ImageEarth2.img'
IDL> s = stregex(file, '([[:alnum:]]+)\.img', /extract, /subexpr)
IDL> print, s[1]
ImageEarth2
```

Mike
--
www.michaelgalloy.com

Subject: Re: String Spliting

Posted by ChristopherFlorio on Thu, 20 Jul 2006 11:13:50 GMT
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Michael Galloy wrote:
> ChristopherFlorio@gmail.com wrote:
>> Actually now I am having a new problem. I want to put text on the other
>> side of the asterisk.
>>
>> file='ImageEarth2.img'
>> filter='Image*.img'
>>
>> file=STRJOIN(STRSPLIT(file,filter,/EXTRACT,/REGEX))
>> file='ImageEarth2.img'
>>
>> with file=STRJOIN(STRSPLIT(file,filter,/EXTRACT))
>> file='Erth2'
>>
>> Any Suggestions?
>>
>
> The desired output is 'ImageEarth2'? I'm not sure what the entire line
> looks like, but how about this?
>
> IDL> file = 'ImageEarth2.img'
> IDL> s = stregex(file, '([[:alnum:]]+)\.img', /extract, /subexpr)
> IDL> print, s[1]
> ImageEarth2
>
> Mike
> --
> www.michaelgalloy.com

The desired output is "Earth2". I want to eliminate all 'filter'
information from 'file'.

Subject: Re: String Spliting
Posted by Michael Galloy on Thu, 20 Jul 2006 13:37:50 GMT
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ChristopherFlorio@gmail.com wrote:
> Michael Galloy wrote:
>> ChristopherFlorio@gmail.com wrote:
>>> Actually now I am having a new problem. I want to put text on the other
>>> side of the asterisk.
>>>
>>> file='ImageEarth2.img'
>>> filter='Image*.img'

```
>>>
>>> file=STRJOIN(STRSPLIT(file,filter,/EXTRACT,/REGEX))
>>> file='ImageEarth2.img'
>>>
>>> with file=STRJOIN(STRSPLIT(file,filter,/EXTRACT))
>>> file='Erth2'
>>>
>>> Any Suggestions?
>>>
>> The desired output is 'ImageEarth2'? I'm not sure what the entire line
>> looks like, but how about this?
>>
>> IDL> file = 'ImageEarth2.img'
>> IDL> s = stregex(file, '([[:alnum:]]+)\.img', /extract, /subexpr)
>> IDL> print, s[1]
>> ImageEarth2
>
> The desired output is "Earth2". I want to eliminate all 'filter'
> information from 'file'.

OK:

IDL> file='ImageEarth2.img'
IDL> s = stregex(file, 'Image([[:alnum:]]+)\.img', /extract, /subexpr)
IDL> print, s[0]
ImageEarth2.img
IDL> print, s[1]
Earth2
```

Mike
--
www.michaelgalloy.com