
Subject: Re: sorting the chars in a string
Posted by [lasse](#) on Mon, 11 Feb 2008 15:02:34 GMT
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On 11 Feb, 15:39, elwood <epolo...@uwsp.edu> wrote:
> I've been trying to think of a simple way to alphabetically sort an
> individual string
>
> Say I have the string x="abdcf"
> Is there a way to sort it and return a new string which is in correct
> alphabetical order,
> and/or reverse alphabetical order.
>
> Maybe its obvious, but I havent worked with strings too much in IDL
> and I cant seem to find
> a way to do this (strsplit and stregex somehow??)
>
> Thanks,
> Elisha

Hi there,

convert the string to an array of bytes, like so

```
test = 'sfbvvaedfvtrgvsvdvrbnnyhtfc'  
tmp = byte(test)
```

This conversion happens according to the ASCII table, if I am not mistaken, which connects a number to a character in ascending order, on my machine a = 97, b = 98 and so on. Then sort that byte array and build up the string again.

```
sort_inds = sort(tmp)  
new_string = string(tmp[sort_inds])  
print, new_string
```

That works, use REVERSE() if you want the sorting done from z-a.

Cheers
Lasse Clausen

Subject: Re: sorting the chars in a string
Posted by [elwood](#) on Mon, 11 Feb 2008 15:36:17 GMT
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Excellent!
Thank you!

A minor variation on the below-

what if I want to split a string into a string array in which each element is one character?

I think I can figure out a lengthy way to do it if I first convert the string to byte.

BUT

strjoin will knit a string array back together, but is there a way to use strsplit to rip off each char, one by one and put them into a string array?

Something like the following perhaps;

```
x="abdcf"
```

```
arrayofchars=strsplit(x,'./regex,/extract)
```

-the above doesnt work, it returns an empty string :-)

On Feb 11, 9:02 am, Lasse Clausen <la...@lbnc.de> wrote:

> On 11 Feb, 15:39, elwood <epolo...@uwsp.edu> wrote:

>

>> I've been trying to think of a simple way to alphabetically sort an individual string

>

>> Say I have the string x="abdcf"

>> Is there a way to sort it and return a new string which is in correct alphabetical order,

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> Hi there,

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```
> new_string = string(tmp[sort_inds])
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```
> print, new_string
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> Cheers
> Lasse Clausen

Subject: Re: sorting the chars in a string
Posted by [Foldy Lajos](#) on Mon, 11 Feb 2008 15:37:13 GMT
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On Mon, 11 Feb 2008, elwood wrote:

>
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> Maybe its obvious, but I havent worked with strings too much in IDL
> and I cant seem to find
> a way to do this (strsplit and stregex somehow??)
>
> Thanks,
> Elisha
>

Just for fun, you can do it without an explicit sort:

```
b=byte(x)
h=histogram(b, rev=r)
x=string(b[r[n_elements(r)-n_elements(b):*]])
or
x=string(b[reverse(r[n_elements(r)-n_elements(b):*])])
```

regards,
lajos

Subject: Re: sorting the chars in a string
Posted by [Spon](#) on Mon, 11 Feb 2008 16:23:34 GMT
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elwood wrote:

- > Excellent!
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- > strjoin will knit a string array back together, but is there a way to
- > use strsplit to rip off each char,
- > one by one and put them into a string array?
- > Something like the following perhaps;
- > x="abdcf"
- > arrayofchars=strsplit(x,','./regex,/extract)
- >
- > -the above doesnt work, it returns an empty string :-(

```
new_string_array = string(transpose(tmp[sort_inds]))
```

- >
- > On Feb 11, 9:02 am, Lasse Clausen <la...@lbnc.de> wrote:
- >> On 11 Feb, 15:39, elwood <epolo...@uwsp.edu> wrote:
- >>
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- >>> Elisha
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