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Subject: Trying to create a plot with strings as x-values...  
Posted by [doowstados](#) on Mon, 14 Apr 2014 02:32:27 GMT  
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Please forgive my poor IDL background. Hopefully you IDL experts can help me out.

I'm attempting to create a plot with strings as x values.

I have two lists being loaded from text files in this format:

```
xlist = list(value1, value1, value1, value2, value2, value3, ..., valueN)
```

```
ylist = list(12, 17, 15, 13, 11.4, 19, 17, ..., numN)
```

These lists are fairly short, maybe 150-200 coordinate pairs total, but only around 50 unique strings in the xlist, so the program doesn't need to be particularly resource efficient.

IDL's plot function and cgPlot don't seem to get along well with strings.

Does anyone know a way around this? Thanks in advance!

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Subject: Re: Trying to create a plot with strings as x-values...  
Posted by [David Fanning](#) on Mon, 14 Apr 2014 04:13:33 GMT  
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doowstados@gmail.com writes:

```
> Please forgive my poor IDL background. Hopefully you IDL experts can help me out.  
>  
> I'm attempting to create a plot with strings as x values.  
>  
> I have two lists being loaded from text files in this format:  
>  
> xlist = list(value1, value1, value1, value2, value2, value3, ..., valueN)  
>  
> ylist = list(12, 17, 15, 13, 11.4, 19, 17, ..., numN)  
>  
> These lists are fairly short, maybe 150-200 coordinate pairs total, but only around 50 unique  
strings in the xlist, so the program doesn't need to be particularly resource efficient.  
>  
>  
> IDL's plot function and cgPlot don't seem to get along well with strings.
```

I presume these "strings" are numbers. Something like '5.2' or '3.4'. If so, just cast them to floats before you plot them.

```
IDL> value = '5.3'
IDL> Help, float(value)
<Expression>  FLOAT    =    5.30000
```

Cheers,

David

--

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

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Subject: Re: Trying to create a plot with strings as x-values...  
Posted by [doowstados](#) on Mon, 14 Apr 2014 05:18:42 GMT  
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Thanks for your reply!

Unfortunately, the strings are text.

I'm looking to make a plot that loosely resembles this:

```
5| *
4| * *
3|* * *
2|  * *
1|*
0|_____ * _____
  A B C D E
```

But A,B,C,D,E are strings of length 3.

listA contains the x values (strings) with some duplicates  
listB contains the y values (floating point values)

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Subject: Re: Trying to create a plot with strings as x-values...  
Posted by [Matthew Argall](#) on Mon, 14 Apr 2014 12:23:35 GMT  
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Something like this?

```
time = indgen(11)
data = randomu(0, 11)
```

```
tickvalues = [0,2,4,6,8,10]
ticknames = ['A', 'B', 'C', 'D', 'E']
cgPlot, time, data, XTICKNAME=ticknames, XTICKV=tickvalues
```

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Subject: Re: Trying to create a plot with strings as x-values...  
Posted by [David Fanning](#) on Mon, 14 Apr 2014 12:33:56 GMT  
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doowstados@gmail.com writes:

```
>
> Thanks for your reply!
>
>
> Unfortunately, the strings are text.
>
> I'm looking to make a plot that loosely resembles this:
>
> 5| *
> 4| *  *
> 3|*  *  *
> 2|  *  *
> 1|*
> 0_____ * _____
>  A B C D E
>
> But A,B,C,D,E are strings of length 3.
>
> listA contains the x values (strings) with some duplicates
> listB contains the y values (floating point values)
```

Maybe you are looking for some version of a dot plot:

<http://www.idlcoyote.com/gallery/index.html#DOTPLOT>

Cheers,

David

--

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

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Subject: Re: Trying to create a plot with strings as x-values...

Posted by [doowstados](#) on Mon, 14 Apr 2014 21:52:53 GMT

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Very close! Thanks!

That would be perfect if it allowed me to swap the x and y axis and only made one of each "label" instead of repeating them like this:

```
5|
4|      *
3|*      *
2|      *
1|* *      * *
0|_____
  A A B B B C D E
```

If that makes sense. I think I can tinker with it to make it work, though.

Thanks!

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