
Subject: Re: Access array elements with String
Posted by [Bob\[3\]](#) on Mon, 14 Jul 2008 16:30:03 GMT
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On Jul 14, 11:49 am, humanumbre...@gmail.com wrote:

> On Jul 14, 11:41 am, Bob Crawford <Snowma...@gmail.com> wrote:

>
>
>
>
>
>

>> On Jul 14, 11:16 am, humanumbre...@gmail.com wrote:

>

>>> Hello all,

>

>>> Another issue - perhaps one of you has encountered this before. It's
>>> sort of a neat problem. I'm attempting to build array subscripts on
>>> the fly based on user input. IE the number of static/variable elements
>>> is changing, which allows the user to pick different axes to plot.
>>> Nevermind all that.

>

>>> Anyway, let's say a user wants a particular axis to be variable. In
>>> this case, the dataset array where I'm attempting to pull values from
>>> would contain a *, to get all these elements. Unfortunately, I do not
>>> know in advance which dimension of the array I will be using, so I am
>>> attempting to build the subscript based on a string.

>

>>> This was my original thought:

>>> a = dindgen(5,5,5)

>>> b = ['3','3','3']

>>> print, a[b]

>>> but this just returns a[3], a[3], a[3]

>

>>> So, I figured I'd do it this way:

>>> c = '3'

>>> print, a[c,c,c] -- This works!

>

>>> Now for the gold,

>>> d = '*'

>>> print, a[c,c,d] -- error - can't convert string-> long

>>> so I get an idea-- maybe I'll just use the ascii value for the
>>> asterisk.

>>> d = String(42b)

>>> print, a[c,d,d] -- error - can't convert string-> long

>

>>> Any thoughts ?

>>> Thanks in advance

>>> --Justin

>
>> Why try to force the '*' - might not SIZE be more useful?
>> e.g.
>> s=SIZE(a)
>> print, a[c,c,s[3]] ; for a[c,c,d]
>> print, a[c,s[2],s[3]]; for a[c,d,d]
>
> Hey Bob,
>
> Thanks for the post!
> I think I may need to elaborate a bit more --
> I need the entire row of the multi-dimensional array.
> So, for example, let's say I have an array that is 30 x 20 x 50
> I will need *,0,0 to plot the first 30 values
> but I could just as easily need 0,*,0 or 0,0,* Depending on user
> input, so I can't anticipate that in advance.
>
> Cheers,
> --Justin- Hide quoted text -
>
> - Show quoted text -

Oops.

I posted too soon (thank you for the clarification Justin - that is what I was trying to do)

Here is what I should have posted:

```
print, a[c,c,0:(s[3]-1)] ; for a[c,c,d]  
print, a[c,0:(s[2]-1),0:(s[3]-1)]; for a[c,d,d]
```

Isn't '*' just short form notation for 0:(s[n]-1), anyway?
