Subject: Re: Evaluating a variable
Posted by David Fanning on Thu, 22 Jan 2004 18:04:27 GMT

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Richard writes:

```
> I want to evaluate a (string) variable to then perform an operation on
> (another) variable whose name is the result of that evaluation.
>
> Let me clarify...
>
> I have a number of 1-D floating-point arrays. I want to take each array
> in
> turn and do stuff with it, something like this:
>
>       PRO blah
>
>       array1=[1,4,3,5.3,42,234,32,..(etc)]
>       array2=[1,6,4.65]
>       array3=[9.1,4,2.02,5,6]
>
>       arrays=['array1','array2','array3']
>       arrayno=-1
>
>       REPEAT BEGIN
>         arrayno=arrayno+1
>
> ; Pick which array I want to operate on, in order
> ; ************************************
>           thisarray=arrays(arrayno)
> ; ************************************
>
> ; Do stuff on the selected array
>           ROUTINE_DOSTUFF,thisarray
>
> ; Loop through all the arrays.
>       ENDREP UNTIL arrayno=2
>
>       END
>
> Except, of course, that this doesn't work, because (in the highlighted
> line) the variable 'thisarray' is set to be the string value 'array1'
> (etc), instead of having the actual array1 copied into it.
```

You could put your arrays into some kind of a list. (Something
as simple as a pointer array might work, or you could use
something like a linked list, if you want something more
complicated.) I'd try something like this:

```
myArrays = PtrArr(3)
myArrays[0] = Ptr_New(array1, /No_Copy)
myArrays[1] = Ptr_New(array2, /No_Copy)
myArrays[2] = Ptr_New(array3, /No_Copy)
```

Then, when you want an array to work with:

```
thisarray = *(myArrays[arrayno])
```

Cheers,

David
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