Subject: Re: Name of arrays
Posted by Russell[1] on Mon, 20 Feb 2012 21:27:03 GMT
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On Feb 20, 4:46 am, Israel Rodriguez Hermelo <israelherm...@gmail.com>
wrote:
> On Feb 19, 5:00 pm, David Fanning <n...@idlcoyote.com> wrote:
>
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>
>> Israel Rodriguez Hermelo writes:
>>> Why did you say that's a slippery slope? Is there a better solution?
>>> I'm already using it with no problems.
>
>> I see a lot of people who are just getting started with
>> programming wanting to name their variables like this.
>> It seems cool, but in the end it just leads to unmaintainable
>> programs. A variable is a variable. The variable named "a" is
>> just as good as the variable named "b". Yes, variables should
>> have good names in programs. But just give them a name
>> (e.g., "theseMonths") in the program module where you need them.
>> Don't go looking for them all over God's creation!
>
>> Cheers,
>
>> David
>
>> --
>> David Fanning, Ph.D.
>> Fanning Software Consulting, Inc.
>> Coyote's Guide to IDL Programming:http://www.idlcoyote.com/
>> Sepore ma de ni thui. ("Perhaps thou speakest truth.")
>
> Thank you for your advice David. I'll try to avoid using
> scope_varfecht then.
> My problem however is not simply that I want to have pretty names for
> my variables. The problem is that I don't know a priori the number of
> arrays that I will need nor their size.
> For example, in some cases the input data might correspond to the
> months of February and July, but in other cases might correspond to
> January, March and April.
>

>   MONTH = ['FEBRUARY' , 'JULY' , 'SEPTEMBER']
>
> To deal with this, I was trying:
>
>   Nmonths=N_ELEMENTS(MONTH)
>
>   for i=0, Nmonths-1 do begin
>
>   readcol, MONTH(i)+'_data.txt', TEMPERATURE
>
>   Ndays=N_ELEMENTS(TEMPERATURE)
>
>   (scope_varfetch(MONTH(r)+'TEMPERATURE', /enter))=fltarr(Ndays)
>
>   endfor
>
> I see why you wrote that scope_varfecht makes the leads to
> unmaintainable
> programs and I would prefer any other solution but I've been looking
> for it in the forum and I haven't found any. Do you have any
> suggestion?
> Thanks in advance!
>
> Regards,
>
> Israel

This is where you should use the pointers. Consider the following:

```
months=['Jan','Feb','Sep']
x=ptr_new(months)
help,(*x)
```

But, months can change on-the-fly and contain any data type

```
 data=[{month:'Jan',numberofdays:31},{month:'Feb',numberofday s:28}]
x=ptr_new(data)
help,(*x),/str
```

and so on. Since you can do any operation on (*x) that you would do on say months=['Jan','Feb','Sep'], this usage means you can arbitrarily define the variables and access the data. Now, it's true that as of IDL 8.* they have introduced new variable types to do this, but until IDL 8 is standard everywhere, you might consider remaining with pointers (for backwards compatibility).

Russell