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Subject: Order of argument evaluation (Was: Re: making a checkerboard array?)  
Posted by Allan Whiteford on Wed, 26 Sep 2007 13:01:11 GMT

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JD Smith wrote:

> On Tue, 25 Sep 2007 09:27:17 -0700, Mike wrote:

>

>

>> I'm trying to make a checkerboard mask for an array, but I'm missing  
>> something that is likely to be obvious to the IDL array masters.

>

>

>> Can anyone help me fill in the missing rectangles like this?

>> <snip>

>

>

>

> l=lindgen(nx,ny)

> l=(l mod (xside\*2) lt xside) XOR (l/nx mod (yside\*2) ge yside)

>

> JD

>

Another solution along similar lines (the point of this post is to ask  
how valid it is) is:

((s=strarr(nx,ny) + '0'))[where(((l=lindgen(nx,ny)) mod (xside\*2) lt  
xside) XOR (l/nx mod (yside\*2) ge yside)) eq 1]='+

In an example:

```
IDL> nx=30
IDL> ny=30
IDL> xside=5
IDL> yside=5
IDL> ((s=strarr(nx,ny) + '0'))[where(((l=lindgen(nx,ny)) mod (xside*2)
lt xside) XOR (l/nx mod (yside*2) ge yside)) eq 1]='+'
IDL> print,s,format='('+strtrim(string(nx),2)+'A1)'
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Anyway, the real point of my post is to ask if I'm allowed to do the above. For a more reasonable example am I allowed to do:

```
plot,(x=findgen(11)),x^2
```

and rely on the first argument of plot being evaluated before the second argument (and the side effect of creating 'x') similarly for creating an array and editing in place, e.g.:

```
IDL> ((a=fltarr(3)))[1]=10
IDL> print,a
      0.00000   10.00000   0.00000
```

Does anyone else do this or just me? I tend to only do things like this at the command line and don't embed it in programs out of fear that it's going to stop working one day. It also arguably makes the code less readable but as a pattern it's probably not that bad. I'd like to know what others think.

Thanks,

Allan

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