
Subject: Re: Array subscripting oddity
Posted by [sterner](#) on Fri, 20 Aug 1993 14:17:52 GMT
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glenn@atm.ch.cam.ac.uk (Glenn Carver) writes:

> I thought I understand array subscripting in PV-wave but this bit of
> code has got me foxed. I was trying to figure out what was going wrong
> with a procedure and finally tracked it down to a problem that I can
> demonstrate using the following example:

```
> WAVE> a=indgen(3)
> WAVE> print,a
>   0   1   2
> WAVE> m=[45,99]
> WAVE> print,m
>   45   99
> WAVE> a(m)=255
> WAVE> print,a
>   0   1  255
```

> Now, I would have thought that because both elements of 'm' are more
> than the size of 'a', no element of 'a' would have been assigned?
> The values '45' and '99' are completely arbitrary. You can set them to
> anything you like.

> If someone could explain what's going on here (maybe it's a bug??) I'd
> be most grateful. The configuration is PV-wave 4.01 running on SunOS
> 4.1.3.

IDL does the same thing. I think of it as a feature, not a bug.
You can use it to your advantage as follows. Let x be a 10 element
array. $t = x(i)$ will fail for scalar values of i that are less than
0 or greater than 9. It is not uncommon that you want to
force i to be in the correct subscript range, in this case you
could say $t = x(i>0<9)$ but in general it is extra work to find
the upper subscript limit. A much simpler fix is $t = x([i])$.

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