Subject: Re: Odd behaviour in array indexing ?
Posted by tam on Fri, 21 Feb 2003 15:53:10 GMT
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David Fanning wrote:
> mwvogel (mvogel@rdiag.fgg.eur.nl) writes:
>
>
>> Today I realized something is amiss in IDL
>> When I do
>> index = [1,0,2,3,1,2,3,4]
>> m = FLTARR(8)
>> d = FINDGEN(8)
>> m[index] = d
>> print, m
>> 1.00000 4.00000 5.00000 6.00000 7.00000
>> 0.000000 0.000000 0.000000
>>
>> Now I would have assumed that IDL would automatically *add* the numbers with
>> identical indices. Not doing
>> so is a potential performance penaly, right ? Or am I mistaken....
>
>
> I find it hard to say what exactly you are trying to
> do here, but IDL seems to be working exactly as I would
> expect it to. Variables on the left hand side of the
> expression are having things assigned to them. I'm not
> sure why you think the assignments should *add*. If I do
> this:
>
> a = intarr(2)
> a[1] = 5
>
> And later,
>
> a[1] = 6
>
> I sure don't want a[1] to equal 11. That is exactly
> what you seem to be asking for above.
>
> Cheers,
>
> David
>

Just to amplify a little. Even if you had written this as
m[index] = m[index] + d
where you might have a more realistic hope that

the m's would accumulate values, it wouldn't work.
It's best to think of IDL array operations as fully parallelized
operations, where there is a separate little CPU handling
the operation for each index. If you need dependencies
on prior iterations, then you need to do things in some different
fashion.

Beware, I think you are about to enter the 'Histogram Zone'.
Dee da dee da ....

Regards,
Tom McGlynn
