Subject: Re: Modifying an array while conserving memory
Posted by David Fanning on Fri, 24 May 2002 02:58:28 GMT
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Randall Skelton (rhskelto@atm.ox.ac.uk) writes:

> I have a large array and I would like to 'insert' some data into the
> middle of it. Imagine an array of 1000 points and having 100 points to
> insert beginning at index 500 (the resulting array will have 1100 points).
> Typically, I do not know the length of data I wish to insert until after
> 'a' is defined.
>
> a = findgen(1000)
> b = randomu(seed,100)
> c = fltarr(1100) ; seems wasteful to use more memory
> c[0:499] = a[0:499]
> c[500:599] = b
> c[600:1099] = a[500:999]
>
> In reality, 'a' is of order 2e7 so I would like to avoid making
> multiple copies of it. Does anyone have any suggestions regarding the
> most memory efficient way of doing this?

I think you are going to have to use some memory to
do this. I always do it like this:

```
a = [a[0:499], array_to_insert, a[500;*]]
```

There are usually some tests to tell if the insertion
point is the first point, the last point, or something
in between.

Cheers,

David
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