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Subject: Re: Loop Arrays

Posted by [Ken Mankoff](#) on Tue, 09 Oct 2001 22:06:36 GMT

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On Tue, 9 Oct 2001, Mark Hadfield wrote:

```
> From: "Ken Mankoff" <mankoff@lasp.colorado.edu>
>> I am interested in creating circular arrays, where subscripts that would
>> be out-of-bounds on a regular array just start indexing on the other side
>> of the array.
>
> You can do quite a lot with ordinary arrays using arrays of indices, eg
>
>   a = indgen(10)
>   print, a[ [0,10,20,100] mod n_elements(a)]
>
```

This is the technique I have been using. However there are 2 cases it does not cover:

1) negative indexes require a few more lines of code to get your example to work. I would recode it as:

```
a = indgen( 10 )
indexes = [ 0,10,20,100,-10,-22 ]    ;;; or some other values...
ind = indexes mod n_elements( a )
neg = where( ind lt 0, num )
if ( num ne 0 ) then ind[ neg ] = ind[ neg ] + n_elements( a )
print, a[ ind ]
```

2) subscript ranges. You cannot do:

```
print, a[ 8:12 mod n_elements(a) ]
```

It is these two specific abilities that I would like to have.

-k.

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