Subject: Re: More For Loops
Posted by majewski on Sat, 15 Apr 2000 07:00:00 GMT
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On 13 Apr 2000 14:56:09 -0500, Craig Markwardt
<craigmnet@cow.physics.wisc.edu> wrote:

Thankyou very much,
This works perfectly, and rather fast too...

For loop - 13.5 seconds
Reform method - 0.45 seconds (just a bit of a difference - when doing
50 or so data sets)

I ended up needing to throw in a couple more reform functions to get
it in the desired form.

```
my_data = reform(my_data, 2, x_data/2, y_data, /overwrite)
 data_sets_ev = REFORM(my_data[0,*,*])
 data_sets_od = REFORM(my_data[1,*,*])
```

```
>
>>  majewski@cygnus.uwa.edu.au_stralia writes:
> ...
>>>   for i = 0, (DATA_size[0]/2)-1 do begin
>>>    for j = 0, DATA_size[1]-1 do begin
>>>     Data_sets_ev[i,j] = my_data[(2*i),(2*j)]
>>>     Data_sets_od[i,j] = my_data[(2*i),(2*j+1)]
>>>    endfor
>>>   endfor
> ...
>>
>>  Keep in mind that a (2M) x N array can be thought of as a 2 x M x N
>>  array -- or an M x N array of pairs.  IDL can reform the first kind of
>>  array into the second, and then it's a simple matter of extracting
>>  what you want.  The "_ev" is the first of each pair, the "_od" is the
>>  second.
>>
>>  my_data = reform(my_data, 2, x_data/2, y_data, /overwrite)
>>
>>  data_sets_ev = my_data[0,*,*]
>>  data_sets_od = my_data[1,*,*]
>
> Ah, replying to myself.  I must be getting older.
>
> I see now that I didn't understand the layout of your original array.
> Your my_data is really a (2*M*2) x N array.  That is, the even and odd
> rows are interleaved.  This is still no problem.  The revised form is:
```

>
> my_data = reform(my_data, 2, x_data/4, 2, y_data, /overwrite)
> ; pair row pair of rows array
>
> data_sets_ev = my_data[0,*,0,*]
> data_sets_od = my_data[0,*,1,*]
>
> In this case it appears that you are only interested in the first of
> each pair of elements, hence the [0,...].
>
> Craig
>
> --
> ----------
> Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu
> Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
> ----------

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