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Subject: Re: REFORM: new subscripts must not change the number elements in array

Posted by [Paul Van Delst\[1\]](#) on Mon, 02 Mar 2015 17:25:47 GMT

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With apologies for replying to my own reply, but if you really want an array B=[100,200,200] from a starting A=[200,200] array, you just use TRANSPOSE (<http://www.exelisvis.com/docs/TRANSPOSE.html>) on the result from REBIN:

```
IDL> help, b
B          LONG      = Array[4, 4, 10]
```

```
IDL> b = transpose(b,[2,0,1])
```

```
IDL> help, b
B          LONG      = Array[10, 4, 4]
```

```
IDL> print, b[0,*,*]
```

```
0
```

```
1
```

```
2
```

```
3
```

```
4
```

```
5
```

```
6
```

```
7
```

```
8
```

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9
```

```
10
```

```
11
```

```
12
```

```
13
```

```
14
```

```
15
```

```
IDL> print, b[6,*,*]
```

```
0
```

```
1
```

```
2
```

```
3
```

```
4
```

```
5
```

```
6
```

```
7
```

8  
9  
10  
11  
  
12  
13  
14  
15

On 03/02/15 12:20, Paul van Delst wrote:

> On 03/02/15 11:46, g.nacarts@gmail.com wrote:

>> I didn't understand the logic of this reform(a, 100l, 200l\*2l). If

>> instead of A=[200,200] we have A=[216,216] and we want 120x(216x216)

>> then this is written as reform(a, 120l, 216l\*2l). Is that correct?

>

> No. That is not correct.

>

> Read:

> <http://www.exelisvis.com/docs/REFORM.html>

>

> The very first line of the description (actually, the only line) says:

> <quote>

> The REFORM function changes the dimensions of an array without changing  
> the total number of elements.

> </quote>

>

> If you start with A=[200,200] and you want B=[200,200,100] (i.e. 100

> sets of 200x200 arrays) then REFORM is not the command to use.

>

> I think you want REBIN:

> <http://www.exelisvis.com/docs/REBIN.html>

>

> IDL> a=lindgen(4,4)

> IDL> print, a

```
>      0      1      2      3
>      4      5      6      7
>      8      9     10     11
>     12     13     14     15
```

>

> Now create 10 "copies" of a, stacked into a 3-D array:

>

> IDL> b=rebin(a,4,4,10)

>

> IDL> print, b[\*,\*,0]

```
>      0      1      2      3
>      4      5      6      7
>      8      9     10     11
>     12     13     14     15
> IDL> print, b[*,*,6]
>      0      1      2      3
>      4      5      6      7
>      8      9     10     11
>     12     13     14     15
```

```
>
>>
```

```
>> I am trying to understand how you end up with reform(a, 100|,
>> 200|*2|). Because when I typed this a = randomu(s, 216,216) help,
>> reform(a, 120|, 216|*2|,/overwrite) I got the same error "REFORM: New
>> subscripts must not change the number elements in A."
>>
```

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