
Subject: Re: array manipulation problem

Posted by [Benno Puetz](#) on Wed, 07 Jun 2000 07:00:00 GMT

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"Martin B. Schmidt" wrote:

```
> Hi,  
>  
> Given:  
>  
> n=500  
> a=FltArr(n,n,n)  
>  
> How can I assign  
> a[i,j,k] = i^2+j^2+k^2 for all i,j,k (i,j,k=0,1,2,...,n-1)  
> without using any loop?  
>  
> Any idea?  
>  
> Martin
```

```
n=500
```

```
i = REBIN(REFORM(FINDGEN(n),n,1,1),n,n,n)^2 ; x^2
```

```
a = i + $ ; x^2
```

```
TRANSPOSE(i,[1,0,2]) + $ ; y^2
```

```
TRANSPOSE(i,[0,2,1]) ; z^2
```

should work if you have enough memory(I only tried n=5, though, since this allocates two large arrays, not counting temporary allocations)

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