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Subject: Re: Q:assigning arrays in steps  
Posted by [Fergus Gallagher](#) on Wed, 10 May 1995 07:00:00 GMT  
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Brett Hennig <bretth@lovelace.maths.monash.edu.au> wrote:

> I've been using idl for one whole week now,  
> so excuse me if this question is stupid.  
> In Fortran90 you can assign arrays like:  
> x(0:10)=y(0:40:4)  
> where the last 4 is a step increment.  
>  
> Can this sort of stuff be done with idl?  
>

G'day,

Easily (not as elegant as F90, but more flexible).

You can index any elements of an array with another array. In your case:

```
IDL> x(0:10) = y(indgen(11)*4)
```

In 2D, this must be a two stage process, since, for example

```
x(0:10,0:10) <> x(indgen(11),indgen(11))
```

The latter is the vector

```
[x(0,0), x(1,1), x(2,2),....x(10,10)]
```

so you would have to write the assignment as:

```
IDL> tmp = y(indgen(11)*4,*) ; 11xN  
IDL> x(0:10,0:10) = tmp(*,indgen(11)*4); 11x11
```

An additional point: you can insert an array into another (larger) array just by specifying the offset, without the range. For example, the last assignment above could have be written as;

```
IDL> x(0,0) = tmp(....)
```

which obviously generalises to abitrary offsets.

Fergus

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