Subject: Re: Help assigning values to ranges of elements in an array???
Posted by chs11 on Wed, 11 Oct 1995 07:00:00 GMT
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In article <45ff2r$n3f@mirv.unsw.edu.au>,
Julian Marshall <jgm@nntp.unsw.EDU.AU> wrote:
> I was hoping someone could help me by suggesting a way by which
> I can assign values to a range of elements in an array. To be
> more exact, I want to make elements 0 to 100 (for eg.) of a
> 200 element array equal to a value or equal to values in a 100
> element array.

a=intarr(200)
b=intarr(100)

a(0:99) = b

b'de, b'de, b'de,... That's all Folks!

Carl

Subject: Re: Help assigning values to ranges of elements in an array???
Posted by nmw on Wed, 11 Oct 1995 07:00:00 GMT
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In article <45ff2r$n3f@mirv.unsw.edu.au>,
jgm@nntp.unsw.EDU.AU (Julian Marshall) writes:
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> Of course I can use for loops but I feel this is inefficient and
> a bit annoying when handling 256*256*256 bytarrs.
> IDL allows one to use an array operation to specify a range of
> values in an array (ie. A=B>10) but is it possible to use an
> array operation to specify a range of elements.
> Thanx
>
> julian
> jgm@newt.phys.unsw.edu.au
> ..
>

For your example you could simply do this (scaled down by 10 of course) :

```
IDL> a=indgen(20)
IDL> print,a
      0       1       2       3       4       5       6       7       8       9      10
     11      12      13      14      15      16      17      18      19
IDL> b=intarr(10)+999
IDL> a(0:9)=23
IDL> print,a
     23      23      23      23      23      23      23      23      23      23      10
     11      12      13      14      15      16      17      18      19
IDL> a(0:9)=b
IDL> print,a
    999     999     999     999     999     999     999     999     999     999      10
     11      12      13      14      15      16      17      18      19
IDL>
```

You can also do things like:

```
IDL> a=indgen(5,3)
IDL> print,a
      0       1       2       3       4
      5       6       7       8       9
     10      11      12      13      14
IDL> a(3,*)=99
IDL> print,a
      0       1       2      99       4
      5       6       7      99       9
     10      11      12      99      14
IDL> a(2:4,1)=0
IDL> print,a
      0       1       2      99       4
      5       6       0       0       0
     10      11      12      99      14
IDL>
```

Or if you had something a bit more complicated in mind :

```
IDL> a=indgen(5,3)
IDL> b=[0,2,4]
IDL> a(b,1)=999
IDL> print,a
      0       1       2       3       4
    999       6     999       8     999
     10      11      12      13      14
IDL>
```

--
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Subject: Re: Help assigning values to ranges of elements in an array???
Posted by rmmoss on Wed, 11 Oct 1995 07:00:00 GMT
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Use array indexing. For example

a = intarr(200)
a(0:100)=3

Will set the values for a(0) through a(100) equal to 3. You can use an asterisk to specify an open range, for example

a(100:*)=5

will set all the values of a(100) to a(199) to 5.

Robert Moss, Ph.D.
Texaco Inc.
mossrm@texaco.com

This is not necessarily the opinion of Texaco Inc.

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|> julian
|> jgm@newt.phys.unsw.edu.au
|> .
|>

Subject: Re: Help assigning values to ranges of elements in an array???
Posted by peter on Thu, 12 Oct 1995 07:00:00 GMT
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Julian Marshall (jgm@nntp.unsw.EDU.AU) wrote:
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: julian
: jgm@newt.phys.unsw.edu.au
: .
:

You can specify a subarray on the LH side of an equation, so, for example,

A(0:10) = 8

or

A(0:10) = B(10:20)

are legal, provided A is already allocated and big enough. For assignment to more complicated shapes within A, you can collect all the desired subscripts into another array, say, C, and use that to index A

A(C) = 0

Have a look at the chapter on array subscripting in the IDL manual, it really is quite powerful.

Peter

--

Peter Webb, HP Labs Medical Dept
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