Subject: subscripting arrays with dim > 1 Posted by fireman on Fri, 28 Aug 1998 07:00:00 GMT

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I'd like to reference an array with a variable containing a subscript for each dimension, passing the subscripts as an array. For instance:

```
IDL > array = indgen(5,5)
IDL> print, array
    0
          1
               2
                     3
                           4
    5
          6
               7
                     8
                           9
   10
          11
                12
                      13
                             14
   15
          16
                17
                      18
                             19
   20
          21
                22
                      23
                             24
IDL> print, array[0,4]
   20
```

But I can't seem to reference each dimension. Instead, the subscript array is passed as two instances of a single subscript:

```
IDL> index=[0,4]
IDL> print,array[index]
0 4
```

I can of course calculate a single index, but it seems a bit clunky:

Subject: Re: subscripting arrays

Benjamin Hornberger writes:

```
> this is probably simple, but I can't figure it out right now:
> I want to extract an element from a 2d array, and I have the 2d
> subscripts of that element available as a 2-element vector.
>
> IDL> a = dist(300)
> IDL > b = [30, 50]
> IDL> print, a[b]
       30.0000 50.0000
 Not what I want. What I want is
> IDL> print, a[b[0], b[1]]
       58.3095
>
> Is there a more elegant way than splitting b up?
If by "elegant" you mean "correct", then the answer is no. :-)
Cheers.
David
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
```

Subject: Re: subscripting arrays
Posted by wem on Mon, 14 Nov 2005 09:53:57 GMT
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```
David Fanning wrote:

> Benjamin Hornberger writes:

>

>

> this is probably simple, but I can't figure it out right now:

>>

>> I want to extract an element from a 2d array, and I have the 2d
>> subscripts of that element available as a 2-element vector.
```

```
>>
>> IDL> a = dist(300)
>> IDL> b = [30, 50]
>> IDL> print, a[b]
        30.0000 50.0000
>>
>>
>> Not what I want. What I want is
>>
>> IDL> print, a[b[0], b[1]]
        58.3095
>>
>>
>> Is there a more elegant way than splitting b up?
>
>
> If by "elegant" you mean "correct", then the answer is no. :-)
> Cheers,
> David
And if you mean by "elegant", "more readable", then the answer is: yes ;-)
IDL> a = dist(300)
IDL> b = [30, 50]
IDL > x = b[0]
IDL> y = b[1]
IDL> print, a[x, y]
and using comments ;-)
```