Subject: array indices again
Posted by Henry Chapman on Thu, 03 Jun 1999 07:00:00 GMT
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Hi all,

I remember a few weeks back there was a lot of discussion about indexing multiple dimensions of arrays, and doing things such as

IDL > print,(a[x,\*])[\*,x]

I just noticed something that may or may not have come up in those discussions (but I wasn't paying attention). It is most easily explained by Liam's example of extracting every second row and column of an array

IDL> a=indgen(10,10)IDL> x=indgen(5)\*2 IDL> print, a[x, x, 0]0 2 4 6 8 20 22 24 26 28 40 42 44 46 48 60 62 66 68 64 80 82 84 86 88

It seems that by extending the 2-d array a into another dimension, where the extra dimension has no size (sounds like string theory!) the indexing works the way I want it to. I noticed this when I had a 3-d array and was extracting a 2-d array from it, as in b[x, x, i] where x is a 1-d array and i is a scalar. This seems to work on arrays of any dimension.

I apologise if this was mentioned before,

Henry.

--

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Subject: Re: array indices again

Posted by Martin Schultz on Thu, 03 Jun 1999 07:00:00 GMT

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Henry Chapman wrote:
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>
> Henry Chapman
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> Information Science & Technology Program
> Lawrence Livermore National Lab
> L-395, 7000 East Ave., Livermore CA 94550
Henry,
 nice feature! I was really astonished when I saw it works even for
non-equal dimensions:
  a = findgen(20,10)
  x = indgen(10)*2
  y = indgen(5)*2
  print,a[x,y,0]
however, (a puzzle for the unexperienced IDL user):
  print,a[x,y]
will result in an error message...
Martin.
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