Subject: Re: MODE in IDL?

Posted by Jonathan Greenberg on Wed, 25 Jan 2006 03:13:59 GMT

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David:

That is the defintion of mode -- it really surprised me this isn't built into IDL, since its a common and basic enough statistic.

```
--j
"David Fanning" <davidf@dfanning.com> wrote in message
news:MPG.1e40988f4505ca03989b37@news.frii.com...
> Jonathan Greenberg writes:
>
>> I can't seem to find the function to calculate the mode of an array --
>> how
>> do I do this in IDL?
> I'm trying to remember back to grade school or somewhere, but
> isn't the mode the maximum of the frequency distribution. I
> remember that the mode isn't unique, because two numbers
> could have the same frequency in the sample (bimodal, I guess)
> and it is theoretically possible to have no mode (all frequencies
 are the same).
>
> But saying all that, if you have an integer array, I would
  think the mode is calculated like this:
>
   array = [1, 1, 2, 4, 1, 3, 3, 2, 4, 5, 3, 2, 2, 1, 2, 6]
>
   h = Histogram(array, MIN=Min(array))
>
   bigfreq = Max(h)
   mode = Where(h EQ bigfreq) + Min(array)
>
   Print, mode
>
     2
  Cheers,
 David
>
>
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming: http://www.dfanning.com/
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