Subject: Re: Excluding Decimal Places in the Values of a Variable
Posted by David Fanning on Thu, 14 Feb 2013 20:55:56 GMT

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Lisa08 writes:

>
> Hi everyone,
>
> I have a question that I think should be very simple to answer but I can't seem to find a solution for it.
>
> I am trying to chop off the last two decimal places for the values of a variable. The values for my variable have 5 decimal places and I want to trim it down to 3. For example, let's say my variable is:
>
> x=[[1.35679, 2.65487], [3.65789, 4.56455]]
>
> So I want to exclude the last two decimal places and have it be:
>
> x=[[1.356, 2.654], [3.657, 4.564]]
>
>
> Now, I know how to do this using a "PRINT" command as below but I don't know how to tell IDL to save the output that was printed out to a variable.
>
>
> IDL> print, x, FORMAT='(F8.3)'
> 1.357
> 2.655
> 3.658
>
> Also, Is there a way to make it "not round up"? I have found a routine that does what I want, excludes the final two decimal places and doesn't round up, but the problem with it is that it converts the values to a string to do this and then I can't seem to convert them back to floats as it gives me the following error:
>
> Type Conversion error: Unable to convert given STRING to Float
>
> The routine I found online to do this is called DECIMALS.pro and is available here:
>
> https://people.ok.ubc.ca/erosolo/idl/lib/decimals.pro

I would do it this way:

IDL> x=[[1.35679, 2.65487], [3.65789, 4.56455]]
IDL> x = Fix(x*1000)/1000.

Cheers,

David

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Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")