Subject: Controlling number of decimal places
Posted by i-kant on Tue, 27 Jul 2004 22:38:47 GMT

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Say I have a DOUBLE variable that holds 200.23234 for example. I want
to output this number to a text file as a number rounded to two
decimal places. In other words, I want to output to a text file
"200.23".

How do I do this? I've looked into the ROUND function but only rounds
to the nearest integer.

Thanks for any help!

Edwin

Subject: Re: Controlling number of decimal places
Posted by David Fanning on Wed, 28 Jul 2004 20:31:45 GMT

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Edwin writes:

> I guess you mean that data is the DOUBLE variable. If so, can you
> explain what F8.2 means? I'm guessing the 2 determines 2 decimal
> places, but what about the rest of it.

Yes, the 2 determines the two decimal places. To learn more
about format codes, type this at your IDL prompt:

   IDL> ? format codes

Cheers,

David

--
David W. Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http:/www.dfanning.com/
Phone: 970-221-0438, IDL Book Orders: 1-888-461-0155

Subject: Re: Controlling number of decimal places

Posted by Paul Van Delst[1] on Wed, 28 Jul 2004 20:58:01 GMT

David Fanning wrote:
> Edwin writes:
>
>
>> I guess you mean that data is the DOUBLE variable. If so, can you
>> explain what F8.2 means? I'm guessing the 2 determines 2 decimal
>> places, but what about the rest of it.
>
>
> Yes, the 2 determines the two decimal places. To learn more
> about format codes, type this at your IDL prompt:
>
>   IDL> ? format codes

Wow. I didn't know you could do that. I tried it and got a little dialog box telling me:

"The topic "FORMAT CODES" does not exist. Valid topic names consist of any
  IDL routine, object, command, statement, or system variable name.

  The IDL Reference Guide will be displayed."

Huh. An *unsearchable* Reference Guide, mind. snuckinfessinrottenrasterdly acrobat reader
on linux.

paulv

Subject: Re: Controlling number of decimal places
Posted by i-kant on Thu, 29 Jul 2004 20:40:37 GMT

Sorry I'm still having trouble with this. I didn't fully explain my
problem.

The complete situation is that I have two DOUBLE variables. Say A and
B, each holding a number with 5 decimal places, ex. 200.52343

I want to output these two numbers rounded to two decimal places to a
text file using PRINTF in the following format (with the comma):

A,B

So If my numbers were 560.34345 and 780.93434, I want my text file to
read:

560.34,780.93

David, I have tried your suggestion about the PRINTF format codes, but
I am having trouble getting it to work:

I can either write:

printf, 1, A, FORMAT='(F8.2)'
printf, 1, ','
printf, 1, B, FORMAT='(F8.2)'

which leads to all three entries being on separate lines.

or I can write:

printf, 1, A, ',', B, FORMAT='(F8.2)'

which also doesn't work since the FORMAT code doesn't know what to do
with the comma in between.

The only solution I can think of is not to use FORMAT codes but to use
some kind of rounding up function...Any ideas?

Subject: Re: Controlling number of decimal places
Posted by David Fanning on Thu, 29 Jul 2004 20:59:06 GMT
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Edwin writes:

> Sorry I'm still having trouble with this. I didn't fully explain my
> problem.
>
> The complete situation is that I have two DOUBLE variables. Say A and
> B, each holding a number with 5 decimal places, ex. 200.52343
>
> I want to output these two numbers rounded to two decimal places to a
> text file using PRINTF in the following format (with the comma):
>
> A,B
>
> So If my numbers were 560.34345 and 780.93434, I want my text file to
> read:
>
>

> 560.34,780.93
>
>
>
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> printf, 1, ','
> printf, 1, B, FORMAT='(F8.2)'
>
> which leads to all three entries being on separate lines.
>
> or I can write:
>
> printf, 1, A, ',', B, FORMAT='(F8.2)'
>
> which also doesn't work since the FORMAT code doesn't know what to do
> with the comma in between.
>
> The only solution I can think of is not to use FORMAT codes but to use
> some kind of rounding up function...Any ideas?

How about this:

  IDL> x=560.34345
  IDL> y=780.93434
  IDL> Print, x, y, format='(2(f6.2,:,","))'
    560.34,780.93

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Controlling number of decimal places
Posted by i-kant on Wed, 04 Aug 2004 16:08:59 GMT
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David Fanning <davidf@dfanning.com> wrote in message

news:<MPG.1b7312f9e76268969897f0@news.frii.com>...
> Edwin writes:
>
>> Sorry I'm still having trouble with this. I didn't fully explain my
>> problem.
>>
>> The complete situation is that I have two DOUBLE variables. Say A and
>> B, each holding a number with 5 decimal places, ex. 200.52343
>>
>> I want to output these two numbers rounded to two decimal places to a
>> text file using PRINTF in the following format (with the comma):
>>
>> A,B
>>
>> So If my numbers were 560.34345 and 780.93434, I want my text file to
>> read:
>>
>>
>> 560.34,780.93
>>
>>
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>> printf, 1, ','
>> printf, 1, B, FORMAT='(F8.2)'
>>
>> which leads to all three entries being on separate lines.
>>
>> or I can write:
>>
>> printf, 1, A, ',', B, FORMAT='(F8.2)'
>>
>> which also doesn't work since the FORMAT code doesn't know what to do
>> with the comma in between.
>>
>> The only solution I can think of is not to use FORMAT codes but to use
>> some kind of rounding up function...Any ideas?
>
> How about this:
>
>
>   IDL> x=560.34345
>   IDL> y=780.93434

```
>    IDL> Print, x, y, format='(2(f6.2,:,","))'
>        560.34,780.93
>
> Cheers,
>
> David
```

Thanks david.

works now. :)