Subject: Re: Problem with variable declaration
Posted by jeanh on Wed, 21 Apr 2010 17:31:04 GMT
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On 21/04/2010 1:24 PM, bala murugan wrote:
> Hi guys,
>
> IDL> print,((10^5)/(exp(10)*factorial(5)))
>
> The actual result of the above line is 0.0378332748
>
> But when we run it in IDL we get the result as -0.011755556
>
> What should be done to rectify this?
>
> Thanks,
> B

be careful of your data type.
10^5 will not work, as the result is an integer... but its intended
value is too big for an integer!

IDL> help,(10^5)
<Expression> INT = -31072

So you can compute this with double precision

IDL> help,(10D^5)
<Expression> DOUBLE = 100000.00

IDL> print,((10^5)/(exp(10)*factorial(5)))
  -0.011755555
IDL> print,((10D^5)/(exp(10)*factorial(5)))
   0.037833276

Jean

Subject: Re: Problem with variable declaration
Posted by Bruce Bowler on Wed, 21 Apr 2010 17:33:28 GMT
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On Wed, 21 Apr 2010 10:24:29 -0700, bala murugan wrote:

> Hi guys,

>
> IDL> print,((10^5)/(exp(10)*factorial(5)))
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For what it's worth, when I run this on windows using 7.1.1, I get the
expected answer...

Are you sure you haven't redefined exp or factorial?

B

Subject: Re: Problem with variable declaration
Posted by bala murugan on Wed, 21 Apr 2010 17:34:26 GMT
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On Apr 21, 11:31 am, jeanh
<jghasb...@DELETETHIS.environmentalmodelers.ANDTHIS.com> wrote:
> On 21/04/2010 1:24 PM, bala murugan wrote:
>
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> -0.011755555
> IDL> print,((10D^5)/(exp(10)*factorial(5)))
> 0.037833276
>
> Jean

Thanks a lot Jean. But when I am using an expression like the
following,

a = (u^x)/(exp(u)*factorial(x))

where u=10 & x = 5

What do I do in this case?

Subject: Re: Problem with variable declaration
Posted by bala murugan on Wed, 21 Apr 2010 17:36:51 GMT
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On Apr 21, 11:31 am, jeanh
<jghasb...@DELETETHIS.environmentalmodelers.ANDTHIS.com> wrote:
> On 21/04/2010 1:24 PM, bala murugan wrote:
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> IDL> print,((10^5)/(exp(10)*factorial(5)))
> -0.011755555
> IDL> print,((10D^5)/(exp(10)*factorial(5)))
> 0.037833276
>
> Jean

Thanks a lot Jean. But when I use an expression like the following,

a = (u^x)/(exp(u)*factorial(x))

where u=10 & x=5,

What should I do in this case?

Subject: Re: Problem with variable declaration
Posted by penteado on Wed, 21 Apr 2010 17:47:18 GMT
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On Apr 21, 2:33 pm, bcb <bbow...@bigelow.org> wrote:
> For what it's worth, when I run this on windows using 7.1.1, I get the
> expected answer...
>

Then you must have compile_opt defint32 (or idl2) set somewhere. With
ints, 10^5 overflows, as jeanh pointed out.

Subject: Re: Problem with variable declaration
Posted by bala murugan on Wed, 21 Apr 2010 17:53:47 GMT
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On Apr 21, 11:47 am, pp <pp.pente...@gmail.com> wrote:
> On Apr 21, 2:33 pm, bcb <bbow...@bigelow.org> wrote:
>
>> For what it's worth, when I run this on windows using 7.1.1, I get the
>> expected answer...
>
> Then you must have compile_opt defint32 (or idl2) set somewhere. With

> ints, 10^5 overflows, as jeanh pointed out.

I am new to IDL. Can you please tell me how to declare a variable as
double or float.?

Subject: Re: Problem with variable declaration
Posted by bala murugan on Wed, 21 Apr 2010 17:55:57 GMT
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On Apr 21, 11:53 am, bala murugan <bala2...@gmail.com> wrote:
> On Apr 21, 11:47 am, pp <pp.pente...@gmail.com> wrote:
>
>> On Apr 21, 2:33 pm, bcb <bbow...@bigelow.org> wrote:
>
>>> For what it's worth, when I run this on windows using 7.1.1, I get the
>>> expected answer...
>
>> Then you must have compile_opt defint32 (or idl2) set somewhere. With
>> ints, 10^5 overflows, as jeanh pointed out.
>
> I am new to IDL. Can you please tell me how to declare a variable as
> double or float.?

I got it guys,

u=double(u)

Subject: Re: Problem with variable declaration
Posted by penteado on Wed, 21 Apr 2010 17:59:46 GMT
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On Apr 21, 2:55 pm, bala murugan <bala2...@gmail.com> wrote:
>> I am new to IDL. Can you please tell me how to declare a variable as
>> double or float.?
>
> I got it guys,
>
> u=double(u)

That is a conversion, not a declaration. In the case you mentioned
above, you can declare as

u=10d0 & x=5d0
