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Subject: print a la C

Posted by [Andrea Spinelli](#) on Thu, 29 May 1997 07:00:00 GMT

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Hi,

does anybody know whether there is a freely available somewhere a function for printing floats in a way similar to the %g argument of printf? E.g.:

```
printf("%g\n",0.02); [C]
results in
0.02
```

```
print, 0.01      [IDL]
0.0100000
```

(no extra blanks, no extra zeroes)

Of course, I could say in IDL

```
print,format='(f4.2)',0.01
```

but I need something that, without knowing the number of digits in advance, makes an earnest effort to save space and keep readability (and works, e.g., also with 0.003!!!)

Thanks in advance,  
Andrea Spinelli  
[spinellia@acm.org](mailto:spinellia@acm.org)

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Subject: Re: print a la C

Posted by [knipp](#) on Wed, 04 Jun 1997 07:00:00 GMT

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In article <338D9954.344A@acm.org>, Andrea Spinelli <[spinellia@acm.org](mailto:spinellia@acm.org)> writes:

> Hi,  
>  
> does anybody know whether there is a freely available somewhere a  
> function for printing floats in a way similar to the %g  
> argument of printf? E.g.:  
>  
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> results in  
> 0.02  
>  
> print, 0.01 [IDL]

> 0.0100000  
>  
> (no extra blanks, no extra zeroes)  
>  
> Of course, I could say in IDL  
>  
> print,format='(f4.2)',0.01  
>  
> but I need something that, without knowing the number of  
> digits in advance, makes an earnest effort to save space  
> and keep readability (and works, e.g., also with 0.003!!!)  
>  
> Thanks in advance,  
> Andrea Spinelli  
> spinellia@acm.org

Andrea,

do something like:

- convert number to string via  
s\_num = strtrim(string(number), 2)
- get last non-zero char. via strpos
- print

Karl

---  
knipp@digitalmap.hi.bosch.de

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Subject: Re: print a la C  
Posted by [R. Bauer](#) on Wed, 04 Jun 1997 07:00:00 GMT  
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Andrea Spinelli wrote:

>  
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>  
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> function for printing floats in a way similar to the %g  
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>  
> printf("%g\n",0.02); [C]  
> results in

```
> 0.02
>
> print, 0.01      [IDL]
> 0.0100000
```

Hi Andrea,

I can share one of my functions with you.  
num\_dec is written by Ray Sterner and you can get it from his library.

<http://fermi.jhuapl.edu/res/>

```
;Copyright R.Bauer
;Institut fuer stratosphaerische Chemie
```

```
function number_format,number,format=format,help=help
```

```
IF keyword_set(help) THEN BEGIN
  print,'(number_forms) no_string=number_forms(number)'
  print,'use format=format to get the Format code'
  return,-1
ENDIF
```

```
ab = strtrim(string(number),2)
```

```
dp = strtrim(string(num_dec(number)),2)
length = strtrim(string(strpos(ab,'.')+1+long(dp)),2)
```

```
form = "(f"+length+"."+dp+"")"
```

```
IF keyword_set(format) THEN BEGIN
  return,form
ENDIF
```

```
return,string(format=form,number)
```

END

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R.Bauer

Institut fuer Stratosphaerische Chemie (ICG-1)

Forschungszentrum Juelich

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