
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

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> writes:

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> 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

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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```
> 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/>

```
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;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

--

R.Bauer

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