
Subject: Re: fractional part of a number

Posted by [Andy Loughe](#) on Thu, 23 Jan 1997 08:00:00 GMT

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Mirko Vukovic wrote:

>
> How does one get the fractional part of a number? Could not find
> anything in the manual.

number = 5.89
frac_number = number - fix(number)

Is one way to do it.

--

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"I do not feel obliged to believe that the same God who has endowed us
with
sense, reason, and intellect has intended us to forego their use."
-Galileo

Subject: Re: fractional part of a number

Posted by [Phil Williams](#) on Thu, 23 Jan 1997 08:00:00 GMT

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Mirko Vukovic wrote:

>
> How does one get the fractional part of a number? Could not find
> anything in the manual.
>

Do you mean this:
IDL> n = 5.5
IDL> print, n mod floor(n)
0.500000
IDL>

Good luck,
Phil
--

/*****
Phil Williams, Ph.D.
Research Instructor
Children's Hospital Medical Center "One man gathers what
Imaging Research Center another man spills..."
3333 Burnet Ave. -The Grateful Dead
Cincinnati, OH 45229
email: williams@irc.chmcc.org
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*****/

Subject: Re: fractional part of a number
Posted by [davidf](#) on Thu, 23 Jan 1997 08:00:00 GMT
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Mirko Vukovic writes:

>> How does one get the fractional part of a number? Could not find
>> anything in the manual.

Then Phil Williams answers:

```
> Do you mean this:  
> IDL> n = 5.5  
> IDL> print, n mod floor(n)  
>     0.500000
```

And Andy Loughie follows this with:

```
> number     = 5.89  
> frac_number = number - fix(number)
```

BUT, and here is the important question: which is FASTER!

No, no, I was just kidding. I do love these kinds of questions, though. :-)

David

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Subject: Re: fractional part of a number
Posted by [thompson](#) on Fri, 24 Jan 1997 08:00:00 GMT
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davidf@dfanning.com (David Fanning) writes:

> Mirko Vukovic writes:

>>> How does one get the fractional part of a number? Could not find
>>> anything in the manual.

> Then Phil Williams answers:

```
>  
>> Do you mean this:  
>> IDL> n = 5.5  
>> IDL> print, n mod floor(n)  
>>    0.500000
```

> And Andy Lough follows this with:

```
>> number    = 5.89  
>> frac_number = number - fix(number)
```

> BUT, and here is the important question: which is FASTER!

> No, no, I was just kidding. I do love these kinds of questions, though. :-)

Actually, neither of these approaches is completely robust, because of their different behaviors for negative numbers,

```
IDL> n = -5.5  
IDL> print, n mod floor(n)  
    -5.50000  
IDL> print, n - fix(n)  
    -0.500000
```

I think the correct way to do it is to combine the two approaches,

```
IDL> print, n - floor(n)  
    0.500000
```

That is, if you agree with me that the integer part of -5.5 is -6, and the fractional part is +0.5. :^)

Bill Thompson
