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 Loughe 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