
Subject: Re: Numbers from nowhere?

Posted by [David Fanning](#) on Sun, 17 Feb 2008 21:53:56 GMT

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elwood writes:

- > But my question is more pointed:
- > if you assign x=3.3
- > and you know apriori that the floating point data type
- > will not have enough bits to store this number precisely,
- > why does "print" show this number as 3.3?
- >
- > Is it because it is rounding off with some kind of algorithm?
- > Or am I misinterpreting how this number is being stored?

I presume it is because whatever number *is* stored,
when rounded to the 7-8 significant figures a float
can accurately represent, comes out to 3.300000.

```
IDL> x=3.3
IDL> print, x, format='(f0)'
      3.300000
```

```
IDL> print, x, format='(f12.10)'
      3.29999999523
```

Cheers,

David

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Coyote's Guide to IDL Programming (www.dfanning.com)

Sepore ma de ni thui. ("Perhaps thou speakest truth.")
