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Subject: Re: Why does  $0.8 = 0.80000001$  ?

Posted by [David Fanning](#) on Mon, 26 Aug 2002 13:14:51 GMT

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Benjamin Panter (benpanterREMOVE@bigfoot.com) writes:

> I've just found something quite interesting and I wonder if anyone had  
> any clues as to why it's happening  
>  
> I have a rather huge program which spits out a set of numbers in an  
> array called str1, declared as a double. When I try to set one of the  
> elements to 0.8, it actually sets to 0.80000001... this is below the  
> accuracy that I worry about, but I'm just rather interested as to why it  
> happens. Some output is below

You will want to read this article:

[http://www.dfanning.com/math\\_tips/sky\\_is\\_falling.html](http://www.dfanning.com/math_tips/sky_is_falling.html)

Cheers,

David

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