Subject: Re: crazy loops
Posted by David Fanning on Wed, 13 Feb 2002 13:35:36 GMT
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M Carmen (mcgonzal@uv.es) writes:

> I have a question related with loops.....can someone teel me why
>
> if i do a loop that goes to a maximum of 0.6:
> for r=0.0, 0.6, 0.1 do begin & print, r & endfor
>
> I get:
> 0.000000
> 0.100000
> [.....]
> 0.500000
> 0.600000
>
> and if now i change the maximum value of the range to 0.7:
> for r=0.0, 0.7, 0.1 do begin & print, r & endfor
>
> I get:
> 0.000000
> 0.100000
> [.....]
> 0.500000
> 0.600000
>
> EXACTLY THE SAME!!!

Well, the short answer is "Because of the way computers represent floating point numbers." There have been numerous posts on this topic in the past. You might try searching the Google archives for "Set Precision", for example. The bottom line, however, is that it is not a good idea to use floating point values as counters, since you can't rely on their exact value. This has nothing to do with IDL. It is entirely related to how computers work.

Cheers,

David

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Coyote's Guide to IDL Programming: http://www.dfanning.com/