

Re: is order urgent doubt

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- *From:* Keith Thompson <kst-u@xxxxxxx>
 - *Date:* Thu, 05 Jun 2008 09:39:58 -0700
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lawrence.jones@xxxxxxxxxxxx writes:

Eric Sosman <esosman@xxxxxxxxxxxxxxxxxxxxxx> wrote [re double double]:

[*] Although one wonders why `long double' wasn't used instead.

Because double double (using a pair of doubles to represent a single floating-point number) in the general case doesn't adhere to the standard's floating-point model and thus isn't a valid implementation of long double. To be a valid long double implementation, you would have to restrict the exponents to make the fraction bits contiguous rather than allowing a gap or overlap.

I don't quite understand. Are you talking about the layout of the fraction bits in the representation of the type? I don't see how making them non-contiguous would violate the C standard (assuming `__STDC_IEC_559__` isn't defined).

How is a pair of doubles used to represent a single floating-point number anyway?

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"We must do something. This is something. Therefore, we must do this."

-- Antony Jay and Jonathan Lynn, "Yes Minister"

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