
Subject: Re: Problem with FLOAT in CW_FORM

Posted by [Axel vom Endt](#) on Tue, 22 Jun 1999 07:00:00 GMT

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Steffen Keitel wrote:

>
> Hello!
> Building a widget based fit program (IDL 5.1 / Linux) I encountered the
> following problem: I use the CW_FORM widget to enter my initial values
> of the fit parameter. If I type e.g. "0.350" in a FLOAT field, IDL will
> work with "0.3499999940" or something like that. How can I teach IDL to
> use the `_exact_` value?

>
> Thanks in advance, Steffen

Hi steffen,

that's a more general problem: How do you tell a computer to work with
0.350 ?

short answer: .35 cannot be represented by a finite binary fraction.

Try the same in c:

```
#include <stdio.h>
int main(){
    float x = 0.35;
    printf("x = %12.10f\n",x);
    return 0;
}
```

For a more detailed answer, refer to any textbook on numerical methods.

Axel
